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ALGERIA & TUNIS

MURRAY'S FOREIGN HANDBOOKS

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the business system. The business system is a complex system of relationships between various stakeholders, including customers, employees, suppliers, and the community. The business system is a dynamic system that evolves over time and is influenced by various factors, including technology, market conditions, and social norms.

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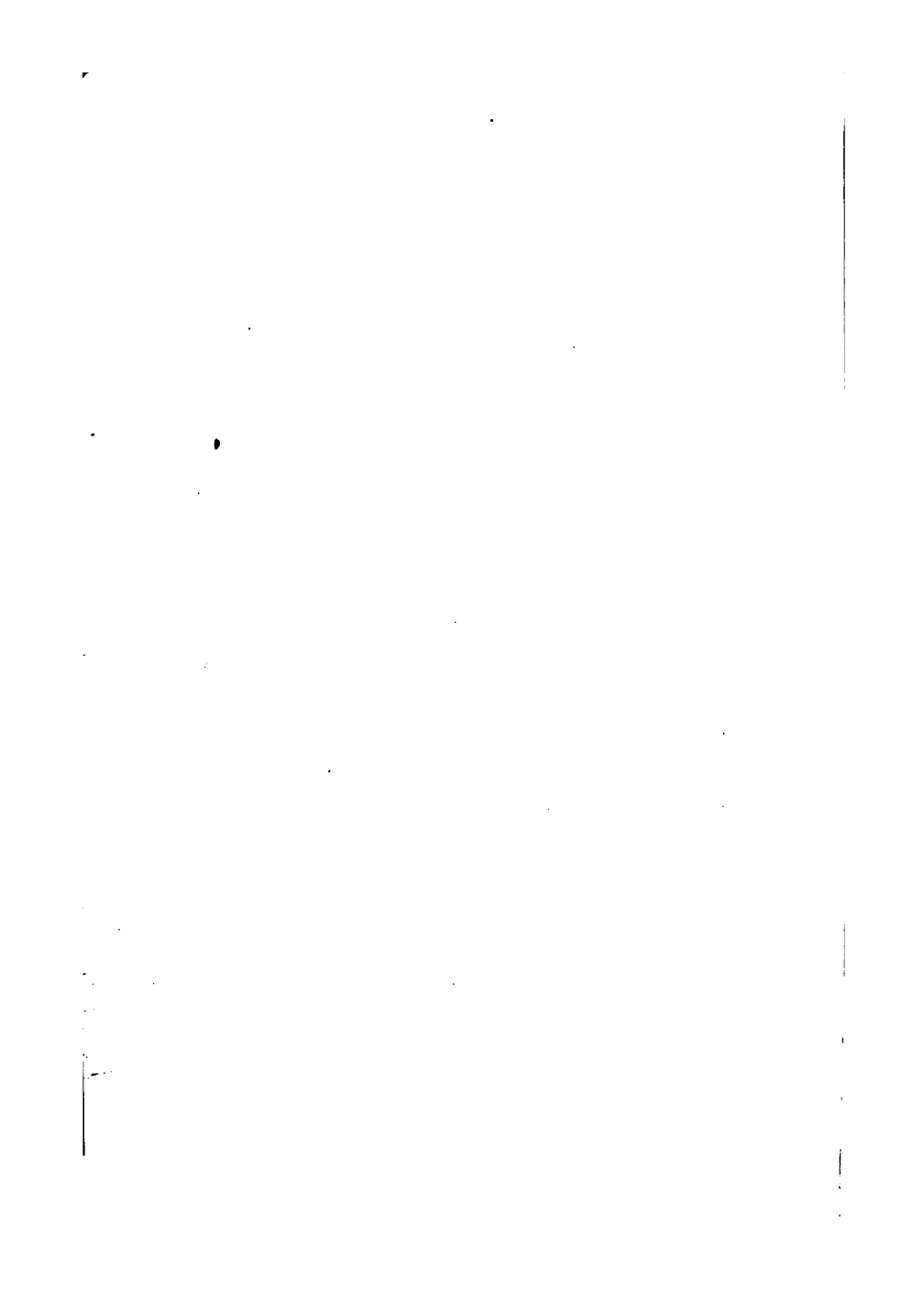
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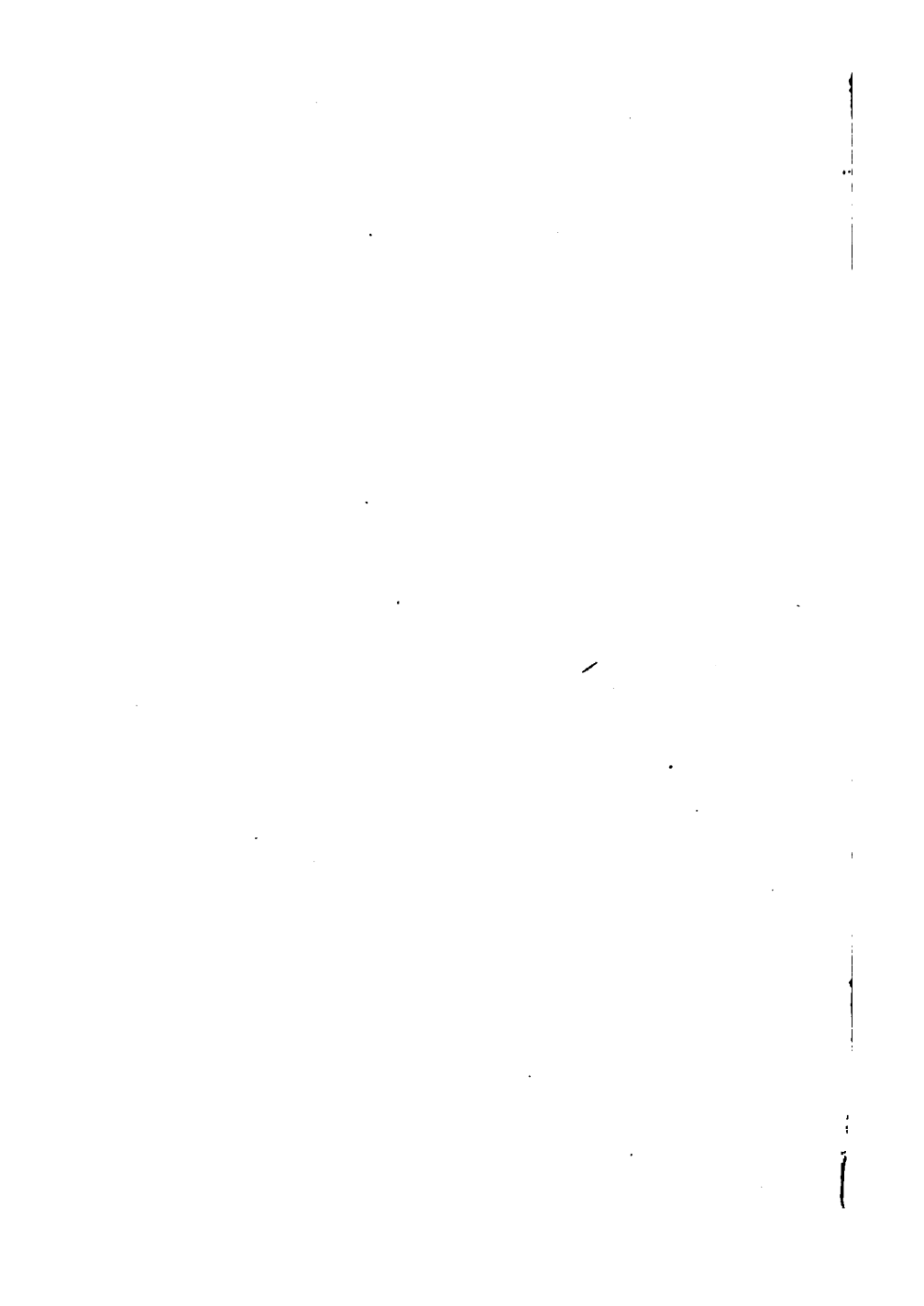
Author's Biography

John Alford is a professor of business ethics at the University of Northumbria, Newcastle, UK. He has published extensively on business ethics and is the author of several books, including *The Business System: A New Paradigm for Business Ethics* (Routledge, 2010).

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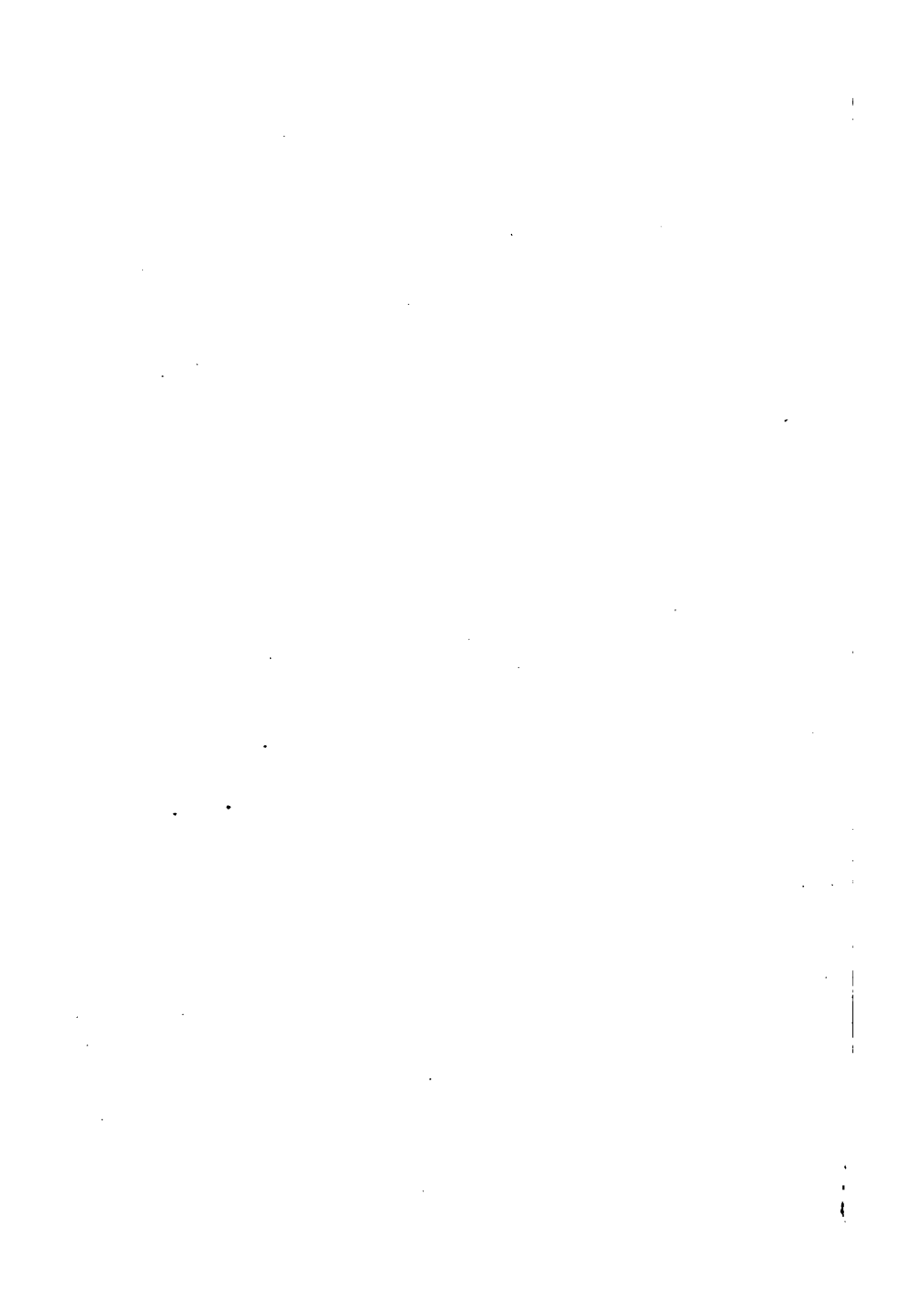




HANDBOOK FOR TRAVELLERS

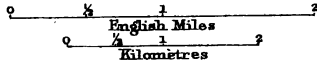
IN

ALGERIA AND TUNIS



2° 50'

MAP OF
ALGIERS
 AND ITS ENVIRONS
 FOR
 MURRAY'S HANDBOOK



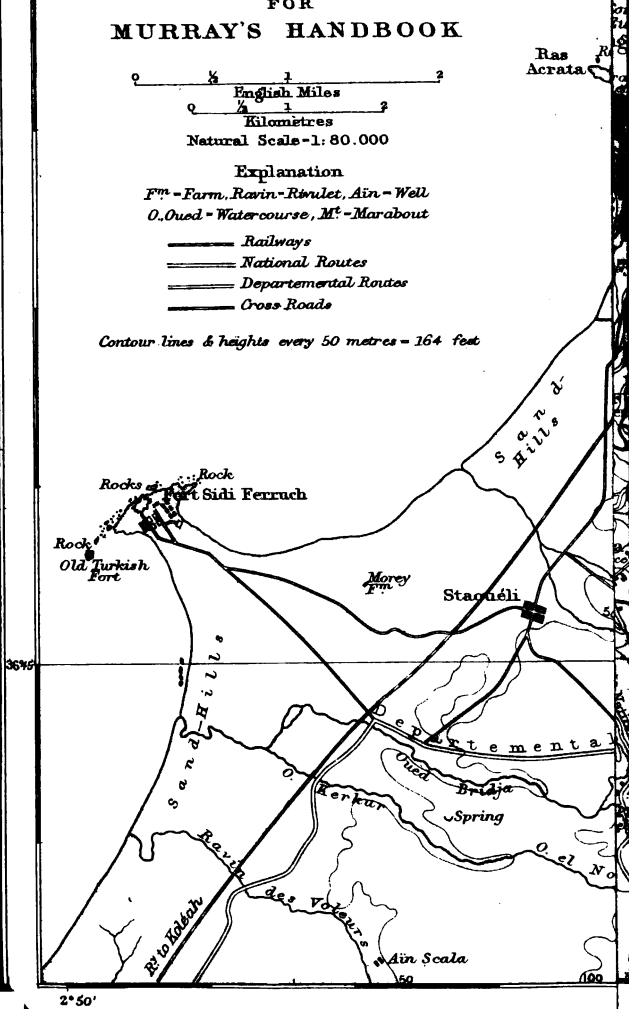
Natural Scale-1:80,000

Explanation

F^m - Farm, *Ravin* - Rivulet, *Ain* - Well
O. *Oued* - Watercourse, *M^o* - Marabout

- Railways
- ==== National Routes
- ==== Departemental Routes
- Cross Roads

Contour lines & heights every 50 metres = 164 feet



2° 50'

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HANDBOOK FOR TRAVELLERS
IN
ALGERIA AND TUNIS

ALGIERS, ORAN, TLEMÇEN, BOUGIE,
CONSTANTINE, TEBESSA, BISKRA, TUNIS,
CARTHAGE, BIZERTA, ETC.

BY SIR R. LAMBERT PLAYFAIR, K.C.M.G.

AUTHOR OF 'HANDBOOK (MURRAY'S) TO THE MEDITERRANEAN;'

'TRAVELS IN THE FOOTSTEPS OF BRUCE;'

'THE SCOURGE OF CHRISTENDOM,'

ETC.

FIFTH EDITION, THOROUGHLY REVISED

WITH MAPS AND PLANS

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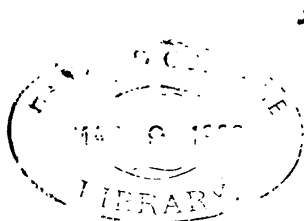
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PREFACE TO THE FIFTH EDITION

A NEW edition of this Handbook has been rendered necessary to keep pace with the many important changes that have lately taken place in Algeria and Tunisia, such as the creation of a harbour at Bizerta, of a canal connecting Tunis with the sea, the establishment of a winter station at Biskra, and extensive archæological discoveries at Timegad, Tebessa, and Tipasa.

The whole work has been thoroughly revised, and to a great extent rewritten. New maps have been substituted for such as were defective, and numerous plans have been added, which, it is hoped, will add greatly to the value of the work.

R. L. P.

ALGIERS, *November* 1895.

In most instances throughout this volume the metric system has been adopted in preference to the English one. The following tables may be found useful by those whose minds have not yet become habituated to this more rational standard :—

5 centimètres = 2 inches.		1 mètre = 3 feet $3\frac{3}{8}$ inches.	
10	„ 4 „	2	„ 6 „ $7\frac{1}{8}$ „
15	„ $5\frac{1}{4}$ „	3	„ 9 „ $10\frac{1}{4}$ „
20	„ $7\frac{7}{8}$ „	4	„ 13 „ $2\frac{3}{8}$ „
25	„ $9\frac{7}{8}$ „	5	„ 16 „ 6 „
30	„ $11\frac{7}{8}$ „	6	„ 19 „ $9\frac{3}{8}$ „
35	„ $13\frac{3}{4}$ „	7	„ 23 „ $1\frac{1}{8}$ „
40	„ $15\frac{3}{4}$ „	8	„ 26 „ $10\frac{3}{8}$ „
45	„ $17\frac{1}{4}$ „	9	„ 29 „ $8\frac{3}{8}$ „
50	„ $19\frac{1}{8}$ „	10	„ 33 „ 0 „
1 kilomètre = $\frac{5}{8}$ miles.		6 kilomètres = $3\frac{3}{4}$ miles.	
2	„ $1\frac{1}{4}$ „	7	„ $4\frac{3}{8}$ „
3	„ $1\frac{7}{8}$ „	8	„ 5 „
4	„ $2\frac{1}{2}$ „	9	„ $5\frac{5}{8}$ „
5	„ $3\frac{1}{8}$ „	10	„ $6\frac{1}{4}$ „

1 hectare = $2\frac{1}{2}$ acres.

The sign Θ after the names of Roman remains indicates places always interesting to the archæologist, but in a less degree to the ordinary traveller.

The orthography recommended by the Royal Geographical Society has been adopted where practicable. A too rigorous adherence to this would only confuse the tourist. The French official orthography of the names of places must be followed, such as Mustapha, Bordj, Djebel, Oued, instead of Mustafa, Borj, Jebel, Wed, etc.

CONTENTS

SECTION I

INTRODUCTORY INFORMATION

SECT.	PAGE	SECT.	PAGE
1 Routes—London to Algeria	1	9 Government of Algeria	65
2 Climate of Algeria	2	10 Sport	68
3 Season for Travelling—Choice of Residence	5	11 Zoology	71
4 Railways	6	12 Geology, Mineralogy, Hot Springs, etc.	76
5 Population and Races	6	13 Colonisation, Cereals, Fruit and Vegetables, Flora, Agri- culture, Forests, etc.	82
6 Native Languages	12	14 Archæology	91
7 General Description of Algeria and Tunis	13		
8 Historical Notice of Algeria and Tunis	21		

SECTION II

ALGERIA

CITY OF ALGIERS	93
EXCURSIONS IN THE ENVIRONS OF ALGIERS	106
A FORTNIGHT'S TOUR IN ALGERIA	113

ROUTES

ROUTE	PAGE	ROUTE	PAGE
1 Algiers to <i>Philippeville</i> , <i>Bône</i> , <i>Bizerta</i> , and <i>Tunis</i> by sea	114	8 Algiers to <i>Constantine</i> by rail	164
2 Algiers to <i>Tipasa</i> and <i>Cher- chel</i>	138	9 Algiers to <i>Aumale</i> and <i>Bou Saïda</i>	173
3 Algiers to <i>Koléa</i> and the <i>Tom- beau de la Chrétienne</i>	147	10 Algiers to <i>Oran</i> by rail	175
4 Algiers to <i>Rovigo</i> and the baths of <i>Hammam Melouan</i>	150	City of <i>Oran</i>	189
5 Algiers to <i>Teniet-el-Ahd</i>	151	11 <i>Philippeville</i> to <i>Constantine</i> by rail	195
6 Algiers to <i>Tizi-Ouzou</i> and <i>Fort National</i>	153	City of <i>Constantine</i>	196
7 Algiers to <i>El-Aghouat</i> , through the <i>Gorge of the Chiffa</i> , <i>Méda</i> , and <i>Boghari</i>	157	Excursions in the Neighbour- hood	207
		12 <i>Constantine</i> to <i>Algiers</i> , by the <i>Chabet el-Akhira</i>	210
		13 <i>Bougie</i> to <i>Beni-Mansour</i> and on to <i>Algiers</i> by rail	213

ROUTE	PAGE	ROUTE	PAGE
14 Constantine to <i>Batna</i> (<i>Timegad</i>), and <i>Biskra</i> . . .	215	21 Algiers to <i>Ténès</i> by <i>Orléansville</i> . . .	259
Excursions in the Neighbourhood of <i>Batna</i> — <i>Lambessa</i> , <i>Markouna</i> , <i>Timegad</i> , <i>Cedar Forest</i> , <i>Aurès Mountains</i> . . .	217	22 <i>Mostaganem</i> to <i>Tiaret</i> by rail . . .	260
15 <i>Biskra</i> to <i>Tuggurt</i> . . .	230	23 Algiers to <i>Tlemçen</i> by railway . . .	267
16 To <i>Tebessa</i> . . .	233	24 Oran to <i>Tlemçen</i> by <i>Aïn-Temouchent</i> . . .	277
17 <i>Tebessa</i> to <i>Souk-Ahras</i> , by <i>Khamisa</i> . . .	241	25 A Tour through the centre of Oran to <i>Mascara</i> , <i>Sidi bel Abbès</i> , <i>Tlemçen</i> , <i>Lalla Marina</i> , <i>Nedroma</i> , and <i>Nemours</i> . . .	278
18 Constantine to <i>Aïn-Beida</i> . . .	247	26 St. Barbe de <i>Tlélat</i> to <i>Sidi bel Abbès</i> by rail and on to <i>Ras el-Ma</i> . . .	281
19 Constantine to <i>Bône</i> by rail . . .	249	27 <i>Arzen</i> to <i>Mascara</i> , <i>Saïda</i> , <i>Mecheria</i> , and <i>Aïn-Sefra</i> by rail . . .	284
20 Excursion through the <i>Kabylia</i> of <i>Djurdjura</i> from <i>Bordj bou Arreredj</i> to the <i>Oued es-Sahel</i> and <i>Fort National</i> . . .	255	28 Oran to <i>Beni Saf</i> , <i>Nemours</i> , and the Frontier of <i>Morocco</i> . . .	291

SECTION III

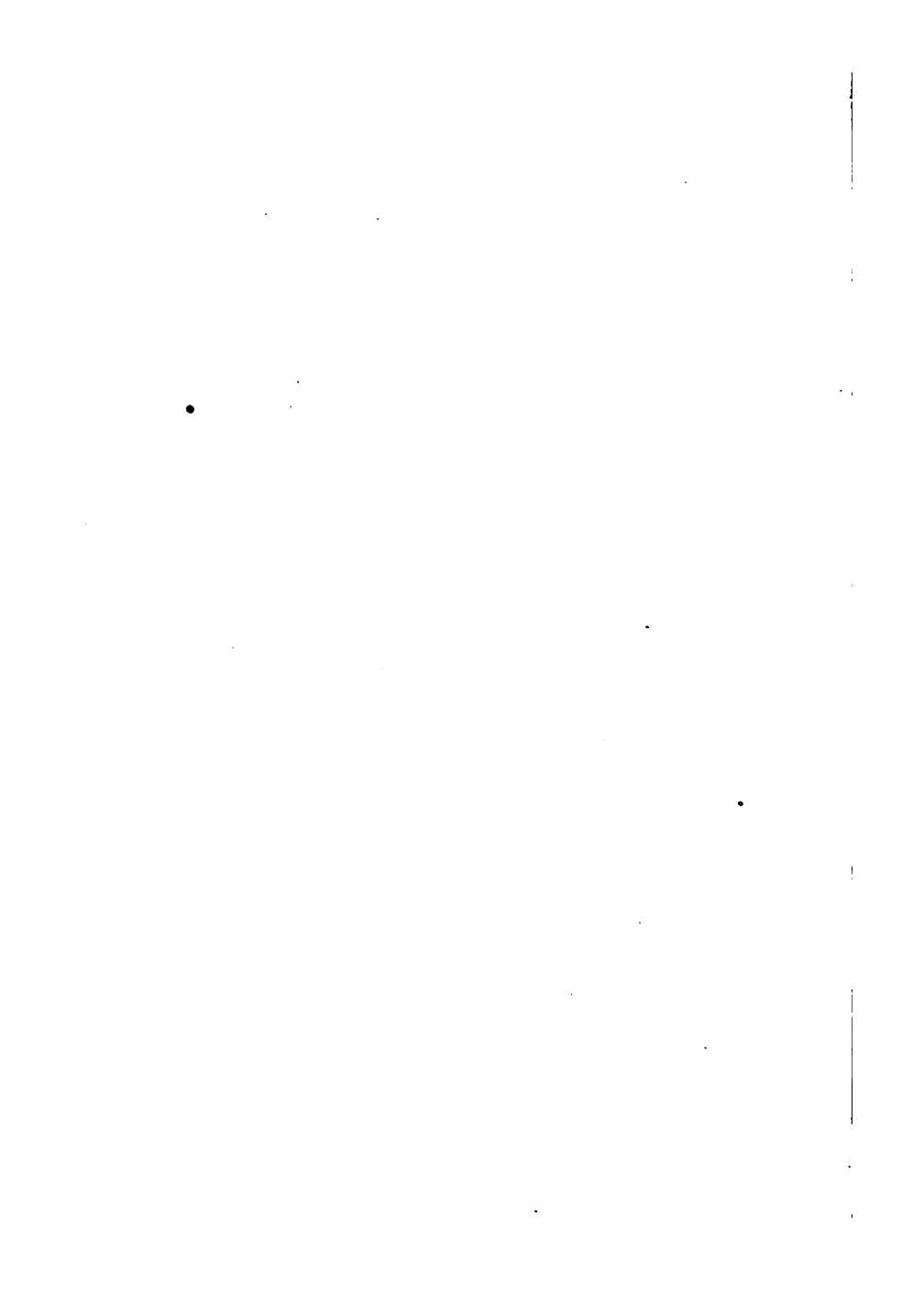
TUNIS

ROUTE	PAGE	ROUTE	PAGE
REGENCY OF TUNIS . . .	295	31 Tunis to <i>El-Kef</i> via <i>Souk el-Arbâa</i> . . .	318
CITY OF TUNIS . . .	297	32 Excursion to <i>Zaghouan</i> and <i>Oudena</i> . . .	320
CARTHAGE . . .	301	33 Voyage along the Coast of Tunis to the <i>Island of Djerba</i> . . .	325
Excursion to the <i>Bardo</i> . . .	307	34 <i>Susa</i> to <i>Kerouan</i> . . .	335
Excursion to <i>Hammam el-Enf</i> . . .	308	35 Excursion from <i>Kerouan</i> to <i>Sbeitla</i> . . .	339
Best Route from Tunis to <i>Algiers</i> . . .	308		
29 <i>Bône</i> to <i>Tunis</i> by rail . . .	309		
30 Excursion in the Country of the <i>Khomair</i> . . .	315		

GLOSSARY OF ARABIC WORDS	xi
INDEX AND DIRECTORY	343

LIST OF MAPS AND WOODCUTS

	PAGE
✓ ALGIERS AND ITS ENVIRONS	<i>To face Title</i>
✓ TOWN OF ALGIERS	<i>To face 93</i>
HARBOUR OF PHILIPPEVILLE	121
" BÔNE	123
" LA CALLE	129
PLAN OF BIZERTA	134
BIRD'S-EYE VIEW OF BIZERTA	135
TUNIS CANAL	137
✓ PLAN OF TIPASA	<i>To face 139</i>
BASILICA OF ST. SALSIA AT TIPASA	142
✓ ORAN AND ITS ENVIRONS	<i>To face 189</i>
PLAN OF CONSTANTINE :	" 195
PLAN OF TIMEGAD	" 219
" BISKRA	" 229
THE DJEDARS	264
✓ TRAVELLING MAP OF ALGERIA	<i>To face 294</i>
✓ TUNIS AND ITS ENVIRONS	" 297
✓ MAP OF TUNIS	" 342



GLOSSARY OF ARABIC WORDS USED IN THIS BOOK

- Ab*, *Aboo*, *Abou*, *Bou*, father, possessor of.
Abd, slave. Pl. *Abid*.
Abiad, white. Fem. *Baida*.
Abiar. Pl. of *bir*, well.
Agha (Turk.), lord.
Ahel, people.
Ahmer, red. Fem. *Hamara*.
Ain, eye, spring. Pl. *Ayoun*. Dimin. *Aouina*.
Ainab, grapes.
Ait. Kabyle for *Beni*, children of.
Akhal, black. Fem. *Kahala*.
Akhdar, green. Fem. *Khadara*.
Alfa, see *Halfa*.
Amala, province.
Amin, head of a *Djemäa*.
Anchir, see *Henchir*.
Annab, jujube, zizaphus.
Aoud, horse.
Aradh, earth.
Arbaa, four, Wednesday, 4th day.
Arch, tribal land.
Areg, sandhill ; *Berr-el-Areg*, country of sandhills, the desert.
Asfel, low. Fem. *Safula*.
Ashour, tax.
Azel, Government land.
Azib, encampment.
- Bab*, gate. Pl. *Biban*.
Bach-Agha, governor of a certain number of tribes.
Badia, country, opposed to town.
Baghal, mule.
Bahr, sea ; *Bahira*, small sea or plain.
Bedoui, bedouin. Pl. *Bedou*.
Beit, house ; *beit-esh-shäar*, hair house = tent.
Beled, town. Pl. *Buldan*. Dimin. *Belida*.
Berd, cold.
Berr, country, region.
Beylick, belonging to Government.
Bin, *Ibn*, son. Pl. *Beni*.
Bir, well. Pl. *Abiar*. Dimin. *Bouir*.
Birkeh, lake, pond.
Blad, more correctly *Belad*, country.
Bordj, castle ; *Bordj-el-fanar*, lighthouse.
Bou, see *Ab*.
- Caftan*, Turkish dress.
Chaiba, ravine.
Chaouch, attendant on Bureau Arab, corresponding to Indian *Peon*.
Chebaka, net. Pl. *Chebabik*.
Chott, salt lake.
Couscous or *Couscousou*, a farinaceous food used by the Arabs ; Kabyle, *Seksou*.
- Dar*, stone house ; *Dar-es-Sanaa*, manufactory.
Daradja, step ; *Droudj*, stairs.
Defla, oleander.
Dekkha, pass, gorge.
Deshera, village.
Dhara, north.
Dhaya, pool, marsh.
Dhib, jackal. Pl. *Dhiab*.
Dhifja, repast offered to guests.
Diss, coarse grass.
Djamäa, mosque, village council.
Djaneb, side.
Djebel, mountain.
Djebeli, mountaineer.
Djeddar, wall. Pl. *Adjdar*.
Djehad, war against infidels.
Djelad, tanner.
Djenan, garden.
Djenoub, south.
Djerid, palm branch, country of palms.
Djidid, new.
Djir, lime.
Djisir, bridge.
Djizira, island. Pl. *Djezair* ; *el-Djezair*, the islands = Algiers.
Dom, dwarf palm.
Douar, group of Arab tents or families
Doula, state, government.
- El*-, The.
- Faras*, mare.
Fedj, pass, col.
Ferka, section of a tribe.
Fernan, cork tree.
Fodha, silver.
Fokani, upper.
Fondouk, inn.

Foum, mouth, opening.
Fourn, oven.

Ghaba, forest.
Ghar, cave.
Gharab, west.
Gharsa, plantation.
Ghazala, gazelle. Pl. *Ghozlan*.
Ghorfa, grotto.
Goum, more correctly *Koum*, body of Arab soldiers.
Gourbi, Arab hut.
Guetar, small wells.

Habs, prison.
Hadari, Arab living in town.
Haddad, blacksmith.
Haddid, iron.
Hadjara, stone. Pl. *Hudjar*.
Hafra, excavation.
Hai, living.
Haj or *Haji*, pilgrim to Mecca.
Halak, throat, canal.
Halfa, esparto grass.
Hamma, warm spring.
Hammam, bath.
Harah, quarter of a city.
Hassi, little well.
Henchir, farm, Roman ruins.
Hezzam, girdle.
Hout, fish.

Ibn, see *bin*.
Ighil, Kabyle for ridge.
Imam, leader of prayers in a mosque.

J, see Dj, usual French orthography.

Kadi, native judge.
Kaffir, infidel.
Kaid, head of a tribe.
Kalaa, fort.
Kantara, arch, bridge.
Kasba, citadel.
Kasr, palace.
Kabila, tribe. Pl. *Kebail*.
Kebir, great.
Kedim, old.
Kef, hill, mount.
Kelb, dog.
Kerma, fig.
Khadem, slave, servant.
Khames, lit. one-fifth; tenants who are remunerated with one-fifth of the produce of land for its cultivation.
Khaukh, peach.

Khazna, treasure.
Khaznadar, treasurer.
Kheit, thread, rope worn by Arabs as a head-dress.
Kheneg, defile.
Khouan, more correctly *Akhouan*, pl. of *Akh*, brother; member of a religious confraternity.
Kibla, direction of Mecca in a mosque.
Kibrit, sulphur.
Korn, horn.
Kotan, cotton.
Koubba, a dome; generally applied to tombs of Mohammedan saints.
Koudia, small hill.
Koum, mound.
Kubr, tomb. Pl. *Kubour*.
Kulb, heart.
Kusab, a reed.
Kusr, palace.

Lela, lady.

Ma, water.
Müaden, a mine.
Müaskara, camp.
Mabrouk, blessed.
Mafrag, bifurcation.
Maghreb, sunset, west.
Maiz, goat.
Makam, place.
Makbara, cemetery.
Makhzen, magazine, civil Spahi.
Mansoura, victorious.
Marabout, more correctly *Marabet*, a person devoted to religion. Pl. *Marabatin*.
Matmor, silos.
Mechera, ford.
Medina, city.
Medjez, ferry.
Medressa, college.
Mehalla, camp.
Melâh, mâleh, salt, *adj.*
Melh, salt, *subs.*
Melk, freehold property.
Melouan, coloured.
Memleka, kingdom.
Menara, minaret.
Menzel, place.
Merdj, meadow.
Meridj, swamp.
Mersa, anchorage.
Mesjid, mosque.
Messaoud, happy.
Mezrag, a lance.

- Mimbar*, pulpit.
Moghreb, west ; the West country, namely, the Barbary coasts.
Mokaddem, head-man ; generally used for the chief of a religious body.
Moulaï, my Lord.

Nalour, observatory.
Nahr, river.
Nakhala, date tree.
Nemel, ant.
Nouba, garrison.

Omm, mother.
Ou, the Berber equivalent of *Ben*, son of.
Oued, river, valley.
Oulad. Pl. of *Walad*, son.
Oumena. Pl. of *Amin*, q.v.
Oust, middle, waist ; central court in a house.

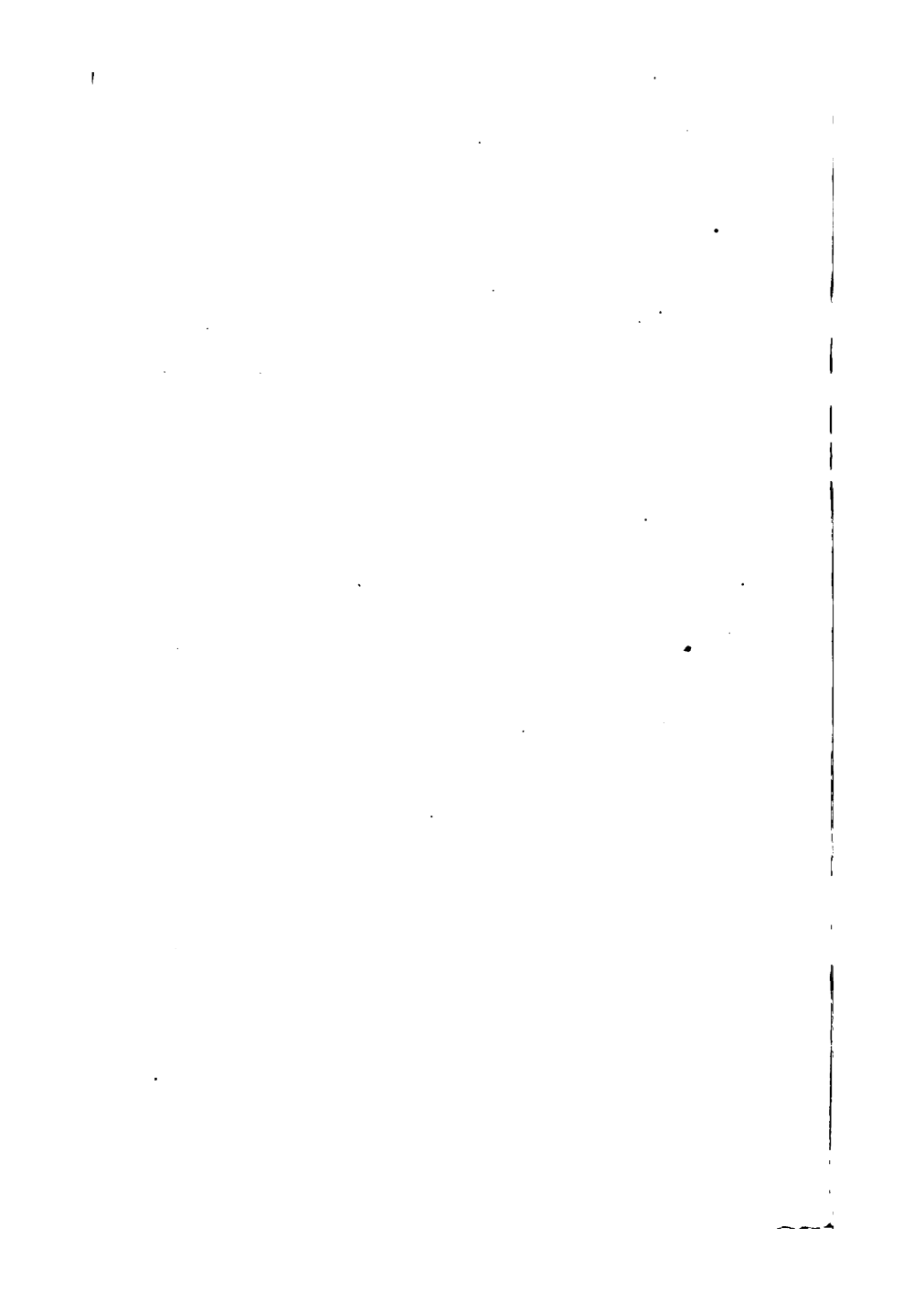
Rahim, merciful.
Rahman, compassionate.
Rais, captain.
Rakham, marble.
Ramla, sand.
Ras, head, cape.
Razzia, more correctly *Ghazzia*, plundering expedition.
Roumi, lit. Roman ; used to express Christian.

Saada, happiness.
Sabegha, tribal land.

Safel, lower part.
Saharidj, cisterns.
Sahèb, owner, companion.
Sahel, coast.
Sakia, canal for irrigation.
Sabala, fountain.
Sebkha, salt lake.
Sebt, seventh, Saturday.
Sedra, zizaphus or jujube tree.
Seghir, small.
Seil, torrent.
Sekkin, knife.
Seksou, Kabyle name for couscous.
Shaham, fat, grease.
Shirk, east.
Si or *Sidi*, my Lord.
Silos, underground receptacles for corn.
Skiffa, vestibule of a Moorish house.
Smala, small fort occupied by Spahis.
Sof, league, confraternity.
Souk, market.

Tüam, food ; couscousou.
Towil, long. Fem. *Towila*.

Zab. Pl. *Ziban*, an oasis watered by a river.
Zan, an oak.
Zuouia, college, convent, or place of refuge for poor scholars or religious mendicants.
Zeitoun, olive.
Zekka, tax on cattle.



ADDENDA, 1902

ENVIRONS OF ALGIERS.

P. 109. **La Trappe de Staouéli.** Men only are admitted to the Monastery proper, but an annexe has been built in which ladies can be served with lunch for a small charge.

P. 112. **Le Fort de l'Eau.** A large Hotel and Casino have been built.

BOUGIE TO DJIDJELLY.

P. 115. At about five hours' drive from Bougie the road (to Setif) has been continued along the coast to Djidjelly.

PHILIPPEVILLE.

P. 120. There are some beautiful Roman mosaics in the garden of Madame Alleman, Avenue de la Mosaïque, who is pleased to show them to any one introduced by the Consul.

BÔNE.

P. 122. The ruins of the Villa Chevillot are worthy of a visit. Some interesting Roman and earlier remains have been discovered in the garden.

BISKRA, TOUGOURT, OUARGLA, AND EL-OUED.

It is advisable to get the permission of the military authorities before starting on an expedition to Ouargla (Wargla) or El-Oued (El-Wad). No permission is required to go to Tougourt (Tuggurt).

The journey to Tougourt can be made by diligence, but if the trip is to be extended to Ouargla or El-Oued, it will be necessary to hire servants and baggage beasts, and to take a bed, canteen, provisions, and either casks or 'gurbahs' for carrying water.

On the roads from Biskra to Tougourt and El-Oued, and on the road from Tougourt to El-Oued, a 'bordj' or rest house, in which travellers can pass the night, will be found at the end of each day's journey. These bordjes contain two or more rooms set aside for the use of travellers. The rooms are, as a rule, furnished with a table and one or two benches. They are fairly clean, and, with the exception of perhaps a few black beetles, entirely free from vermin. Firewood, cous-cous, coffee, eggs, milk, and fowls, can sometimes be procured from the guardians of the larger bordjes. There is no fixed charge made for the use of the rooms, but the guardian expects a small fee.

The French soldiers have first claim upon the rooms. It very rarely

happens that all the rooms are occupied ; but, in order to avoid spending a night in the open air, in the event of this being the case, a small tent should be carried ; this also is of advantage in freeing the traveller from the necessity of reaching and spending the night in a bordj.

For the journey from Tougourt to Ouargla a tent is a necessity, as between Bled et Ahma and Ngoussa there are at present no bordjes at all.

Beds, tents, canteens, provisions, and all other necessaries for a camping expedition can be hired at Biskra. The beds should be well supplied with blankets, as for an hour or two before sunrise it is often bitterly cold in the desert. Either 'gurbahs' (goatskin water-bags) or small casks must be taken for carrying water. Gurbahs keep the water cooler, and are lighter and more convenient to carry, but they give the water a disagreeable taste. A liberal supply of mineral water should be taken for drinking purposes, as the water to be procured in the desert is often strongly impregnated with salt.

Sand spectacles provided with tinted glasses should be taken, for the dust and glare is often very trying to the eyes.

(a) BISKRA TO TOUGOURT.

As the route from Biskra to Tuggurt (or Tougourt) is described in the body of this book (p. 230), it is only necessary to note the new bordjes which have been built, and to add a few details for the use of those who intend to travel independently of the diligence.

40 kil. *Bir Djeffair*, a small bordj with a well of fairly good water in the neighbourhood.

71 kil. *Setil*. A small bordj has recently been built in the neighbourhood of this well. About a mile to the S.W. are several upright pillars marking the graves of the Oulad Moulad who were massacred here by the Touaregs.

76 kil. *Michattulou*. An artesian well of brackish water has been sunk here.

104 kil. *Maghaier* or *Mraier*. Five artesian wells have been sunk here, and the oasis has now been increased to 80,000 palms.

131 kil. At the well of *Meza Berrig* or *Nza ben Rzig* a bordj has been built.

There is now an alternative route from *Ourlana* (p. 231) to *Tougourt* *vid*

155 kil. *Sidi Amran*, a village built of mud bricks surrounded by 12,000 palms. There is a very strong artesian well giving 4800 litres per minute. Accommodation can be had at the bordj built on the south of the oasis.

179 kil. *Moggar*, a ruinous village standing on a tongue of sand running out into the chott. There is a badly-kept bordj. This route, though a

few miles shorter than the usual one *via Sidi Rachid* (p. 231), should not be attempted after rain, as the salt crust which covers the Chott then becomes extremely slippery.

200 kil. **Tougourt** (see p. 231).

(b) TOUGOURT TO OUARGLA.

The route usually taken is as follows :—

13 kil. *Temacin* (see p. 232). Accommodation for the night could be found, if necessary, a short distance further on in the house of the marabout at

15 kil. *Zaouia Tamelath* (p. 232).

23 kil. *Bled et Ahma*, a village situated at one side of an oasis. There is a good 'Dar-Diaf' (house for strangers) where the night can be passed. The key is kept in the village. There are 30,000 palms in the oasis.

81 kil. *Hassi Mamar*, a small well sunk by the side of the caravan route. There is a concrete trough for watering animals, but no appliances for drawing the water. The nomadic Arabs and camel drivers who use these wells bring leathern buckets and cords of their own. These Hassis, or small wells, were formerly covered with leathern lids, which in their turn were covered with sand, in order to hide the wells and prevent them from being used by strangers. The French have now forbidden this practice; the result has been that, after a dust storm, these wells cannot be relied upon, as they will frequently be found half full of the sand which has drifted into them.

146 kil. *Ngoussa*, an oasis containing 75,000 palms. A considerable quantity of tobacco and cotton, besides fruit trees and vegetables, is grown in the oasis.

The town of Ngoussa is in a decaying state. It is surrounded by a fortified wall, and a moat half full of stagnant water almost overgrown with flowering reeds and shrubs. The 'Dar-Diaf' has fallen down, but will probably be shortly rebuilt. Accommodation can be procured at the caid's, or at some other Arab house.

The road, after leaving Ngoussa, passes through numerous palm groves full of half-dead trees, which the dwindling population of the place has been unable to preserve from being overwhelmed by the drifting sand. The road now runs for some distance among the sand-dunes, but at length emerges on to a level sandy plain. The little mounds of earth and branches torn from the desert scrub, which have hitherto been seen cast down on either side of the road to act as 'gemeerahs' or artificial landmarks, now cease, for Ouargla is in sight.

162 kil. **Ouargla** lies in the centre of a forest of palm trees. From a distance little but the twin minarets of the two principal mosques can be seen to indicate the position of the town.

At the time of its conquest by the French, Ouargla was surrounded by

a moat and dilapidated loop-holed walls. The moat, which has now been filled up, forms a broad road running round the town. The wall has been restored where necessary. Six curious gateways, fortified in the Arab style, give access to the town.

There are 1400 houses and about 3500 inhabitants. The houses are well and solidly built. Many of them are decorated over the doorways by pieces of bright-coloured pottery let into the wall, or texts from the Koran in large raised plaster letters. In the walls of the street are niches for the reception of little earthenware lamps, which are lighted on Friday in the evening, and in the evenings of the feast days of the Mohammedan year.

Ouargla claims to be the oldest city in the Sahara. It was originally ruled by an aristocracy, but the inhabitants became so disgusted at the perpetual quarrels among their rulers that they applied to the Emperor of Morocco to give them a Sultan. He consented on condition that they should pay him in return his weight in gold. To this the inhabitants agreed. On their arrival in Morocco to claim their future ruler, they found that the Emperor had found for them the largest of his sons—a huge man—and had fattened him up until he was of enormous size. His weight in gold was however paid, and he was carried off in triumph to Ouargla, where he and his family reigned for many generations.

Before the arrival of the French in Algeria, Ouargla was a great *entrepot* for the trans-Saharan trade with the Soudan. But by suppressing the slave traffic the French have almost entirely diverted the trade into Morocco and Tripoli. Ouargla has suffered in consequence.

Ouargla is divided into three quarters for the Beni Ouaggin, the Beni Sissim, and the Beni Brahim. In the 17th century the Beni Brahim rose and murdered all the members of the Mzab tribe whom they found in their quarter. No Mzabi since that date has lived in the quarter of the Beni Brahim.

The French buildings lie to the south of the Arab town; they consist of a post and telegraph office, a fort, barracks, and hospital.

A monumental tablet in French and Arabic, to the members of the Flatters expedition who were murdered by the Touaregs in the Sahara, has been let into the southern wall of the fort.

There is a very primitive hotel kept in an Arab house, where the traveller could stop. An Arab house could be hired for one or two francs a day.

(c) TOUGOURT TO EL-OUED.

The road from Tougourt to El-Oued follows the telegraph line. Letters are carried by camel post between the two towns. 'Gemeerahs' (pyramids of stone) have been erected every few miles along the road to act as landmarks.

On leaving Tougourt, after passing through some palm plantations and

crossing the little chott which lies to the east of the town, the road emerges on to the higher ground beyond, and takes a direct line over small sand-dunes and occasional patches of harder ground for

25 kil. The bordj of *Mgeellah*. From this point the road as far as El-Oued lies entirely among the sand-dunes. A curious little burrowing lizard, called by the Arabs the *Hout-el-Erdth* or 'land fish,' is very common in this neighbourhood. The *Lef'a* or horned cerastes viper is also to be found here.

56 kil. *Mouïat-el-Ferdjann*, a bordj. The dunes now commence to grow larger, and continue to do so until El-Oued is reached. Vegetation becomes sparser and sparser until, on the huge dunes in the neighbourhood of El-Oued, it is reduced to a few tufts of rank grass.

83 kil. *Mouïat-el-Kaid*, a bordj among the dunes.

107 kil. *Oourmas*, a bordj.

112 kil. *Kouinine*, a village. The road here leaves the dunes and turns sharply to the right.

121 kil. **El-Oued** is one of the most interesting towns in Algeria. The view from the minaret of the mosque by the market, across the stone-domed roofs of the diminutive houses and the huge basin-like hollows in which the palm groves are planted, to the mass of sand-dunes which stretch in each direction to the horizon beyond, is extremely curious and characteristic.

The houses are built entirely of stone, roofed with little hemispherical domes about six feet in diameter. They are all of one story, and are seldom more than eight feet in height; in many of them it is only just possible to stand upright.

The palm plantations of El-Oued lie at the bottom of enormous basin-shaped hollows, forty or fifty feet deep, excavated in the sand in order that the roots of the palms shall reach the water-bearing stratum below. The sand dug out during this process is carried by donkeys to the surface, and deposited so as to form a raised embankment all round the outside of the pit to prevent the sand from drifting in. As an additional protection, a fence of palm leaves is sometimes erected along the top of this embankment. But, in spite of all the means taken to guard against it, the sand is continually drifting back into the plantations, and only the continual labour bestowed upon them prevents the groves from being overwhelmed and smothered by the sand.

The palms of El-Oued well repay the labour bestowed upon them. They bear dates of the finest quality. A single tree will frequently yield twenty-five francs' worth of dates in the course of a year, and 250 francs per palm is by no means an uncommon price to pay for a plantation in the neighbourhood of El-Oued.

With the exception of the modern French fort, El-Oued, unlike most Saharan towns, possesses neither wall, moat, gate, nor fortification of any

kind. The French fort, containing the barracks and government offices, lies on the south side of the town.

On the opposite side of the street is an ill-kept 'Dar-Diaf' where the traveller could stay; but he would probably be more comfortable if he hired an Arab house.

A curious currency known as *fous*, consisting of obsolete copper coinage of the old dynasties of Algeria and Tunis, is in use in El-Oued and the surrounding oases. Seven *fous* are equal to one sou.

El Oued is the chief town of the district known as the *Oued Souf*, or more shortly as the *Souf*.

The *Souafces*, as the inhabitants of this district are called, are divided into two distinct tribes—the *Adouan*, the original inhabitants, and the *Trood*, a branch of the Sha'ambah Arabs who, about 1820, on account of the murder of one of their number, came from Ouargla and settled themselves forcibly in the neighbourhood of El-Oued.

A blood-feud, resulting in much raiding and bloodshed, exists between the Sha'ambah and the *Tawareks* or *Touaregs*. The latter, a branch of the Berber race, are sparsely scattered over the whole of the Western Sahara. Occasionally some of them may be met with at Ouargla, at El-Oued, or even at Tougourt. They are easily recognised by their great stature and the curious black mask by which they conceal their faces. On account of their marauding propensities they are the terror of caravans crossing the Sahara, who, in order to pass safely through their country, pay them a heavy blackmail. Tamahack, the language of the Tawareks, is a dialect of the Berber tongue. It is written by them in an alphabet of their own.

Occasionally a small party of Tawareks may be found encamped in their leathern tents in the neighbourhood of Ouargla or in the Oued Souf. Caution should be exercised in visiting their camps, as the Tawareks bear a very bad reputation.

(d) EL-OUED TO BISKRA.

9 kil. *Kouinine*.

15 kil. *Tar-out*, a village.

18 kil. *Gomar*, a village with a Zaouia allied to that of Temacin. Some of the rooms in the Zaouia have gaudily-decorated ceilings. There is a good bordj on the outskirts of the town. A considerable quantity of tobacco is grown in the neighbourhood.

65 kil. *Bou Chama*, a bordj.

97 kil. *Sif-el-Menadhi*, a bordj and small plantation of palms. Close to the bordj will be seen one of the so-called 'desert mosques,' a small square plot of ground surrounded by a dwarf stone wall about a foot in height, and having in its eastern side a semicircular niche to represent the 'Kiblah.' It is used as a praying-place.

122 kil. *Hameraiia*, a bordj overlooking the *Chott Bedjeloul*. The road crosses the corner of *Chott Merouan* before reaching the bordj of

151 kil. *Mguebra*.

175 kil. *Chegga*, a bordj. Here the route joins the Tougourt-Biskra road.

186 kil. *Bir Djefair*, a bordj.

198 kil. *Sa'ada*, a bordj.

226 kil. **Biskra**.

EXCURSIONS FROM TUNIS.

1. **Zaghouan** (p. 320) can be visited by train, so that one can easily go and return in one day. There is a station on the Tunis-Zaghouan line not far from Oudena. One can go by morning train, come out at this station and visit **Oudena**, and proceed by evening train to Zaghouan. Zaghouan can be seen next day, the return to Tunis being made in the evening. In this way both places can be visited in two days. Accommodation for the night can be had at Zaghouan, but it is necessary to take provisions.

2. **Utica** (p. 137) can be visited in a day by carriage. Good cycles can be had at Tunis, and as there is an excellent road, this is by far the easiest way for those who can cycle.

3. Among the excursions from Tunis, that to **Dougga**, where the French archaeologists have been excavating, is much to be recommended. The theatre there is a perfect one. It is even in a better state of preservation than the Theatre of Dionysos at Athens. The Temple of Jupiter, Juno, and Minerva is one of the gems of architecture in the whole of Tunisia. It is wonderfully perfect. There are also the Temples of Saturn and Cœlestes, whose outlines the French have exposed. At Dougga there is also the Libyo-Punic monument from which Sir Thomas Reade removed the bi-lingual stone which is now in the British Museum. Apart from the antiquities, the picturesqueness of the country would claim for it a visit.

The best way to reach Dougga is by train to Medjez-el-Bab, and thence by carriage *viâ* Testour (the ancient Tichilla) and Ain-Tounga (the ancient Thignica), where there are also extensive Roman remains. Fairly comfortable quarters can be had for the night at a hotel in Teboursouk (the ancient Thubursicum bure) kept by a Spanish woman, M^{de}. Chazoby. There is not much accommodation—say six beds. The cooking is excellent and charges moderate. Bed, 2 frs. ; meals, 2.50 frs. (including wine). Dougga is about 4 miles from Teboursouk, and can be reached on donkeys or on horseback. Carriages can go part of the way, leaving a short climb to be undertaken on foot.

EXCURSION FROM KEROUAN TO SBEITLA.

Carriages for this excursion (p. 339) should be obtained at Sousse, not at Kerouan, where it is doubtful whether they could be got. The charge is 25 frs. a day for a carriage with four horses. A day would have to be allowed for the journey from Sousse to Kerouan. This journey should scarcely be undertaken without the help of the French authorities. At least it is greatly facilitated by the aid of the Controleurs Civils, who give introductions to the sheikhs and appoint native cavaliers or spahis for the protection and guidance of the traveller.

At Hadjeb-el-Aioun accommodation can be obtained at the military garrison, if an introduction be obtained from the Controleur Civil at Kerouan. At Sbeitla there is no shelter obtainable except what the ruins afford. The journey is difficult in the rainy season, when the *oueds* become torrents; in March and April it is more easy. There are no roads or bridges, merely caravan tracks.

SECTION I.

INTRODUCTORY INFORMATION.

	PAGE		PAGE
1. ROUTES—LONDON TO ALGERIA	1	8. HISTORICAL NOTICE OF ALGERIA AND TUNIS	21
2. CLIMATE OF ALGERIA	2	9. GOVERNMENT OF ALGERIA	65
3. SEASON FOR TRAVELLING—CHOICE OF RESIDENCE	5	10. SPORT	68
4. RAILWAYS	6	11. ZOOLOGY	71
5. POPULATION AND RACES	6	12. GEOLOGY, MINERALOGY, HOT SPRINGS, ETC.	76
6. NATIVE LANGUAGES	12	13. COLONISATION, AGRICULTURE, FORESTS, ETC.	82
7. GENERAL DESCRIPTION OF ALGERIA AND TUNIS	13	14. ARCHÆOLOGY	91

§ 1. ROUTES—LONDON TO ALGERIA.

The direct route from England to Algeria is through Paris and Marseilles. The traveller can either reach the latter place by the ordinary route, *via* Lyons, or by the more picturesque one passing through Clermont-Ferrand and Nîmes.

At the present moment (1895) the service between Marseilles and Algiers is carried on by steamers of the *Transatlantique Company*, but as their contract expires on the 30th June 1895, and as a new contract will probably not be made for a year after that date, the traveller should consult the ordinary time tables.

The voyage to Algiers occupies about 27 hours, varying with the vessel and the state of the weather, and costs £4. Cheaper but less comfortable vessels of the *Compagnie Mixte* (54 Rue Cannebière, Marseilles) also run weekly between Marseilles and Algiers, but they are not recommended.

Vessels of the *Holt* or *Ocean Line* leave Liverpool for Algiers weekly—agency, 1 India Buildings, Liverpool. Those of *James Moss and Company* leave bi-monthly—agency, James Street, Liverpool; and the *Papayanni Company's* steamers also leave bi-weekly—agency, Fenwick Chambers, Liverpool.

The two last will forward heavy baggage. For baggage by *Ocean Line* apply to Alfred Booth and Co., 14 Castle Street, Liverpool.

[*Algeria*]

Travellers will be saved much trouble and inconvenience if they procure tickets before leaving London from Messrs. T. Cook and Son (Ludgate Circus, Charing Cross, and 35 Piccadilly), who are always ready to furnish the traveller with all information he may require.

The splendid steamers of the *North German Lloyd* run every fortnight in winter from New York to Gibraltar, Algiers, Naples, and Alexandria, and touch at Algiers on the return voyage.

§ 2. CLIMATE OF ALGERIA.

The traveller coming to Algiers with the idea that he is to find a rainless and almost tropical winter, will certainly be disappointed. For this he must go to Egypt, where fertility is not dependent on rainfall. At Algiers he will find the best winter climate on the western shores of the Mediterranean, but it will not be without a due proportion of rain and cold.

June, July, August, September, and October are practically rainless, and the three last extremely hot.

November gives what would be counted the loveliest summer weather in England, with occasional, and probably very heavy, rains.

December, January, February, and March are not unlike an English autumn, with a double allowance of sunshine, and of rain also, and none of its dampness.

April and May, again, give the most perfect English summer weather, with but very little rain, and are certainly the most enjoyable months in the year.

The seasons are, however, extremely variable. During the many years which the writer has spent in Algiers, no two winters have been alike, and a high functionary once remarked to him that he had spent thirty years in Algeria and had seen thirty exceptional winters.

Usually the rain falls heavily when it falls at all, and is seldom of long duration. The fine drizzling rain so common in the north of Europe is here of rare occurrence, and in the neighbourhood of Algiers itself the soil is of so absorbent a nature, and the ground so steep, that the moment the rain ceases and the sun has reappeared, the roads dry, and delicate invalids can take their exercise in the open air. But once or twice in the course of the season a bout of rain and wind must be expected which will continue two or three days. Even in these cases the air is not damp, and wet objects not actually exposed to the rain will become dry when it is falling most heavily. Rain falls on the average on about 80 days out of the 365; but not more than one quarter of these could with any propriety be termed "wet days." To ensure a fine harvest, at least 36 inches of rain are required; and for visitors the rainier seasons are found the most enjoyable, dust being, in Algiers, even in winter, a far greater annoyance than rain. It may be added that about 60 per cent of the rain usually falls at night. The average in Algiers is about 29 inches. The first rains after the long summer drought, which are also the heaviest downpours, occur generally about the middle of October, and produce an instantaneous change in the climate. December and January are

usually the wettest months of the twelve on the coast of Algeria ; on the high ground in the interior the most abundant rains are expected in the spring ; but any month from October to March *may* be the wettest of some particular season, and travellers are pretty sure to have some bad weather about the time of the vernal equinox (21st March).

Frost and snow are in Algiers so rare as to be almost unknown, though hailstorms are frequent. But on the High Plateaux, and on the most elevated inhabited parts of the Tell, the frost is severe, the snow lies long and deep, while the highest mountains retain some snow patches as late as the beginning of June.

The rain, the wind, and the cold generally come from the N.W. The N.E. wind, so dreaded in Europe, is here almost unknown, and harmless when it does come. There is absolutely nothing at Algiers answering to the terrible mistrale of the Riviera. The north winds, tempered by 500 miles of sea, have had all mischief extracted from them in their passage ; and the cold which comes with or after the rain has none of that searching keenness so disagreeable in winds blowing directly from snowy mountains. The sirocco, or desert wind, is in winter merely a pleasantly warm, dry breeze ; in spring and autumn it can be disagreeably hot, but its terrors are reserved for the summer months. Fortunately it does not often last more than three days at a time, but during its continuance the thermometer will rise about 100° in the shade on the sea-beach, and much higher a little distance inland ; the sky becomes dim ; the air is charged with fine sand, vegetable life seems to become suspended, and it is by no means an uncommon event to see a whole field of vines withered in a moment by a blast of this burning wind.

When the sirocco is not blowing, the nights, even during the hottest season, are cool and refreshing, and dews are copious.

There can be no doubt that Algiers is the best winter residence within easy range of England. It is not so warm and agreeable as Madeira or Egypt, but it is preferable to any place on the north shore of the Mediterranean, and it has the great advantage of being within four days' easy journey of London. Whatever a climate can do for a sick person Algiers ought to accomplish, but it cannot work a miracle.

It is cruelty for the physician to recommend the hopelessly consumptive patient to quit the comforts of his own home and the society of friends in the hope of restoring health, a hope which he well knows to be fallacious.

For some heart diseases the climate of Algiers is remarkably efficacious, even more so than for pulmonary complaints.

As a rule the patient should not prolong his stay after the first heats of summer have commenced, yet it ought to be known that some of the most remarkable cures that have been effected here have been in the case of those who have spent two winters and the intervening summer in Algiers.

The following tables will give a more accurate idea of the climate of Algiers than any mere description of it :—

TABLE OF TEMPERATURE (Fahrenheit) compiled from Observations made, under the Algerian Government, at the Military Hospital of Algiers (Hôpital du Dey), during 13 years from 1865 to 1877. The thermometers are placed about 300 yards from the sea-beach, about 50 feet above the sea-level, and about 6 feet from the ground.

	Hottest Day, i.e. Highest Maximum in 13 Years.	Coldest Night, i.e. Lowest Minimum in 13 Years.	Coldest Day, i.e. Lowest Minimum in 13 Years.	Warmest Night, i.e. Highest Maximum in 13 Years.	Average Maximum in 13 Years.	Average Minimum in 13 Years.	Average Mean Temperature in 13 Years.
January	77	82	48	62	60½	48	54
February	75	32½	48	63	62	48½	55½
March	82½	34	51	66	64	50	57
April	96½	37	50	70	68½	53½	61
May	89½	45½	57	72½	73½	58½	66
June	101	53	66	75	78½	63½	71
July	102	57½	75½	77	84½	69	76½
August	111	56½	75	82½	86½	70	78
September	109	53½	68½	79	83	68	75½
October	97	44	61½	79	75½	61	68½
November	84½	40	53½	68½	66½	54	60½
December	77½	34	50	66	61½	48½	55

N.B.—On the sides and top of the hills about Mustapha it would be necessary to add about 3 degrees to extremes of heat, and subtract about 4 degrees for extremes of cold.

TABLE OF RAINFALL (reduced to English inches) compiled from Observations made, under the Algerian Government, at the Military Hospital of Algiers (Hôpital du Dey), during 14 years from July 1864 to June 1878. The rain-gauge is about 300 yards from the sea-beach, about 50 feet above the sea-level, and about 15 feet from the ground.

	Average Rainfall in 14 Years.	Highest Rainfall in 14 Years.	Lowest Rainfall in 14 Years.	Average Number of Days on which a Measurable Quantity of Rain has fallen.	Greatest Number of such Days.	Least Number of such Days.	Heaviest Rainfall in 24 Hours in the 14 Years.
January	3·64	7·66	·28	10	17	2	3·30
February	2·40	5·40	·06	7	16	2	1·48
March	3·97	9·17	·56	12	23	4	1·89
April	2·02	4·20	·04	6	12	1	1·46
May	1·21	2·78	·04	5	11	1	2·05
June	·91	3·43	·04	3	9	1	2·13
July	·09	·46	· . .	1	3	0	·32
August	·40	4·04	· . .	1	5	0	3·98
September	1·21	7·00	· . .	3	10	0	2·25
October	3·72	10·06	·85	8	18	3	2·84
November	4·01	7·00	1·16	10	19	4	1·77
December	5·42	8·38	·68	13	20	1	1·91
Total	29·00			79			

The average rainfall of Algiers may be estimated at 788 mil. = 29 inches ; that of Oran at 510 mil. = 19 inches ; at Constantine there is about 644 mil. = 24 inches, but much less on the High Plateaux of that province. For instance, the average at Setif is only 644 mil. = 24 inches ; Batna, 412 mil. = 15 inches ; whereas on the coast it is much greater, 1189 mil. = 44 inches at Bougie ; 945 at Djidjelly = 35 inches ; 789 at Philippeville = 29 inches ; and 842 at La Calle = 31 inches.

§ 3. SEASON FOR TRAVELING—CHOICE OF RESIDENCE.

The best season for visiting Algeria is from the beginning of November to the end of May. During January, February, March, and part of April, a good deal of rain may be expected, and many of the routes are then difficult, if not impossible. Still, short excursions may be made at any time when the weather appears settled. November and December are good months for travelling in the interior, but not nearly so much so as April and May, when all nature is bright with the hues of spring and the most gorgeous wild-flowers. Beyond all doubt May is the finest month in the year, but the days are somewhat hot, and walking in the sun oppressive.

The only recommendation which it is necessary to give regarding clothing is, that the traveller bring and wear exactly the same garments as he would use in England at a corresponding season. The cold, of course, is much less in Algeria, but it is felt more.

Visitors to Algeria may be divided into two categories, the tourist and the invalid ; the former will not care to remain very long in one place, and need only consult his own inclination as to a choice of residence. To the latter, however, this question is a very serious one. He generally comes abroad at great personal inconvenience, and he is willing to sacrifice every consideration to the vital one of health.

Until lately he almost invariably selected Algiers as his residence ; now he begins to ask himself the question whether he ought not to go to Biskra—to choose, in fact, between Europe and Africa. The region of the Atlas is a mere continuation of the south of Europe, with a very similar fauna and flora, joined to, not separated from it, by the Mediterranean Sea ; it is not till we reach the Sahara that everything is distinctly African.

Biskra is practically rainless, but it has counterbalancing disadvantages ; it is within a very short distance of the highest point of the Atlas, covered with snow during the winter months, and the cold winds are often very trying to invalids. It has not the splendid vegetation, the beautiful scenery, and generally the amenities of life which make Algiers so pleasant a winter residence, but for some cases there can be no doubt that it is very beneficial.

We will suppose that he gives the preference to Algiers ; in that case he will do well to avoid the town as much as possible, and live in the country. In most cases the higher up he rises on the Mustapha hill, the better and purer is the air. The writer is almost inclined to say *the warmer is the climate*, for though houses on the highest level are more exposed to the wind, they

escape the damp vapour which frequently clings to the valleys below, and they are more thoroughly exposed to the sun. The ascent is hardly an objection, as it is balanced by the advantage that, once on the summit, an invalid can walk for miles almost on level ground, amongst a never-ending variety of shady lanes, whereas lower down his rambles must be entirely on the public road, and either up or down hill.

There are numerous villas situated in beautiful gardens in the environs of Algiers, and many excellent hotels and pensions.

The best locality for a winter residence is the slope of Mustapha Supérieur, and along the road leading thence, past the Colonne Voirol towards El-Biar.

Rents have risen considerably of late, and it is hardly possible to obtain the smallest furnished villa with a garden there under 3600 f. for the season of six months, and they range from that sum up to 8000 or 10,000 f. In less desirable quarters, such as the village d'Iely, the Agha, Mustapha Inférieur, and St. Eugène, the prices are lower, but the houses are not so good, and those localities are far less healthy and enjoyable.

English visitors reside generally in the country hotels in preference to those in the town; the former are in every respect more healthy and enjoyable, though perhaps a little more expensive. For more precise information regarding houses, servants, etc., visitors may apply to Mr. Dunlop, 13 Rue d'Iely, house and general agent. He also keeps a butcher's and grocer's shop, where visitors are sure to find all they can possibly require.

§ 4. RAILWAYS.

The railway system of Algeria has made rapid progress of late years. The aim of the administration is to have a central line from Tunis to Morocco, passing through the most important points in the interior, and various subsidiary lines joining this with the sea.

The lines actually open are indicated in the body of the work.

§ 5. POPULATION AND RACES.

The population of Algeria, according to the census of 1891, was as follows:—

Departments.	French.	Jews.	Spaniards.	Italians.	British.	Germans.	Other Europeans.	Mohammedans.	Total.
Algiers .	120,087	14,895	45,686	12,582	2,772	1,064	4075	1,259,421	1,460,582
Oran . .	78,980	19,794	102,453	4,836	256	1,315	3160	728,293	939,037
Constantine	72,084	12,875	3,720	21,748	11,640	810	2180	1,584,970	1,710,031
Total .	271,101	47,564	151,859	39,161	14,677	3,189	9415	3,572,624	4,109,650

In comparing this census with that of 1881 there appears an increase of 52,926 in favour of the former year—an increase which is apparent in all

classes of the population, except Tunisians and Moroccans, Italians, British, and Germans.

It is most marked in French (48,297), Jews (4382), Mohammedans (299,750), and Spaniards (9366).

The two principal divisions into which the Mohammedan races inhabiting Algeria may be divided are the Berbers and Arabs. The former is a branch of the great aboriginal people which inhabited the north of Africa as far south as the Soudan, Egypt, Nubia, and as far as the west shore of the Red Sea. But the word *Berber* is an inaccurate one; it was quite unknown to the ancients, who always designated the aboriginal races by specific names, such as *Lybians*, *Numidians*, *Massylians*, etc. It was the Arab conquerors who first united them all by using the term *Berber*, meaning to imply people whose language they could not understand; they themselves never recognised the appellation, and do not use it now.

Distinct bodies of this race still exist, especially in the more inaccessible parts of the country; but, for the most part, they have become amalgamated with the Arabs, and have lost both their distinctive character and language. This blending of the native races with their conquerors took place at two distinct epochs, the first after the brilliant conquest of North Africa by the Arab warriors in the 7th century (see p. 31), and the second after the more serious invasion of an immense Arab population in the 11th century (see p. 33).

The most important branches of this people still retaining anything like purity of origin or distinctive language are the *Kabyles* and the *Chawia*—the latter are described further on; the former, who inhabit the mountainous districts nearer Algiers, and with whom the traveller comes more frequently in contact, deserve a separate description.

The Kabyles (Arab. *Kabail*, pl. of *Kabila*, a tribe).—This name is given to the people of Berber origin who inhabit the mountains of the littoral; the *Beni-Manassir*, to the south of Cherchel, and various tribes bordering the Metidja, are as much Kabyles as the mountaineers of Djurdjura. Kabylia proper, however (see p. 15), has a population of about 206,000, less than a tenth of the whole native inhabitants of Algeria.

It is certain that this race has at various epochs been much mixed with other elements, and the *debris* of the Greek and Roman colonies must have constituted a considerable portion of this mixture. The religious persecutions of the Arians and Donatists, which so effectually prepared the way for Islamism, no doubt drove many of the poorer members of these colonies for safety to the mountains, where they soon became mixed up with the aboriginal inhabitants. There can still be traced among their customs the traditions of Roman law and municipal institutions, and one frequently meets amongst them types, easily recognisable, of the Latin and Germanic races. Some have supposed that the crosses which Kabyle girls are in the habit of tattooing on their faces and arms are remnants of the Christian faith; as also the very different position occupied by the women to that usual in Mohammedan countries.

Many of their families no doubt had European ancestors, dating from long

after the extinction of the Romans ; their own traditions assert this fact, and the beauty of the women of *Aït Ouaguennoun*, which is proverbial in the country, is regarded as a proof of their foreign origin. The Arab element amongst them was introduced later, less by actual conquest than by the moral influence of Islamism, and the institution of slavery has had the effect here, as in all Mohammedan countries, of introducing black blood into the mixture.

Kabylia, having preserved its independence for centuries, has always afforded a safe retreat to political and criminal refugees ; they were received with an unquestioning hospitality, and ended a career of adventure in these peaceful retreats. The secret of their origin has died with them, but their traces remain in the fair complexion, blue eyes, and red hair, everywhere found in the country, which certainly do not belong to African or Asiatic races.

In almost all their essential characteristics the Kabyles are the very opposite of the Arabs. They never mount on horseback ; they are not nomades or pastoral ; but they are strong and industrious, excellent farmers, cultivating their land with the care usually bestowed on market-gardens. They are industrious mechanics, and manufacture several articles, such as pottery and jewellery, with great taste and elegance.

One of their most distinguishing characteristics is intense patriotism. This is manifest in all their institutions, but especially by a custom which prevailed amongst them in times of danger, or invasion by a foreign enemy. A number of the youth enrolled themselves in a sort of forlorn hope called *Imessebelen* (pl. of *Messebel*), whose duty it was to sacrifice their lives for the protection of their country. The prayers for the dead were read over them before going into action, from which they could only return victorious. If they were killed their bodies were buried in a cemetery apart, which was ever after used as a place of prayer, and considered as peculiarly deserving of veneration. Were one of them to escape with the loss of honour from the field, he and all his kindred would for ever be held in contempt as outcasts.

Moreover, the Kabyle character lends itself more readily to social progress than that of the Arab : he is less distrustful, more industrious, and less disposed to that life of lazy indifference which is characteristic of the latter. He is surrounded on all sides by European colonisation, and willingly frequents the farms of colonists in search of work ; while the greater part of the Arabs live in isolated tribes, and have rarely an opportunity of seriously appreciating the advantages of civilisation.

The Kabyles all belong to the Mohammedan religion, and to the orthodox *Maleki* rite—that is, they have adopted the doctrine of the Imam Malek as their interpretation of religious civil law (see also p. 15). Their dress is of a whitish hue, sometimes black and white, and consists of the *haik* over the *chelouka* or woollen shirt which extends below the knee. They wear a small skull-cap on the head, generally a complicated mass of rags fastened with cord on their feet, and usually the *burnous* when travelling.

Numerically the most important class of the native population are the **Arabs**, who are, as their name implies, of Arabian origin, and date back

from the Arab occupation of the country in the 12th century. They took possession of the most accessible portions, and drove the original owners, the Berbers, into their mountain fastnesses.

At the present day they are far less advanced than the Kabyles; they retain the habits, ideas, and nomadic life of the most primitive times, and if they have emerged from barbarism, they have certainly not attained civilisation.

They are divided into tribes, some of which are of ancient origin, but many are of a much more recent date, and some are simply aggregations of groups, as natural as possible, made by the French to facilitate the operations of the *Bureau Arabe*.

Each tribe is commanded by a *Kaid*, whose duty is to exercise surveillance over it, carry out the orders of the French authorities, arrest malefactors, and collect taxes, for which he receives a certain percentage; he listens to all complaints, and either himself redresses the aggrieved or submits the case to the administrator of his circle. He is responsible for the good order and loyal conduct of his tribe. These *Kaids* are always nominated by the French, and are usually chosen from the most influential families. Thus, in time of peace, they greatly aid the French authorities, though they are dangerous to a corresponding degree in time of war or insurrection. Attempts have been made to place men of inferior birth, but of approved fidelity, in these posts, but the experiment has never succeeded; the moment an insurrection breaks out, their power is defied, and whether the great families are in office or not, if they rebel, the tribe is sure to follow them.

The tribes are divided into a greater or less number of *Ferkats* or sections, according to their importance, each of which is administered by a *Sheikh*. These are all under the orders of the *Kaid*, who has a lieutenant or *Khalifa* to aid him.

The *Ferkat*, again, is composed of several *Douars*, composed of the tents of a certain number of persons more or less nearly related to each other. The *Ferkat* is a political or artificial group, the *Douar* is essentially a family one.

The union of several tribes was called a *Bach Aghalik*, the *Bach Agha* being the highest native dignity conferred by the French. These, however, are now almost entirely suppressed.

Justice is administered among the Arabs by *Cadis*, who have districts containing two to four tribes, and who perform their functions under the surveillance of the *Bureaux Arabes* in military territory, or of the Administrator where civil jurisdiction prevails.

The Arabs are essentially a nomad race, living in tents, which they change from place to place as the pasturage around them is consumed. They are not fond of hard work, and the men at least do not engage in industrial pursuits; agriculture is the labour they prefer to all other. The theft of a plough is sacrilege, the manufacture of one a pious work.

The nomad existence is not without its advantages among a people so primitive and so filthy in their habits. The moving about their flocks from place to place serves to manure the ground, and prevent its utter exhaustion; and where men and animals all live together, the constant striking and pitch-

ing of their tents conduces to cleanliness and to the destruction of a portion at least of the vermin with which they are infested.

The land tenure in Algeria has hitherto been such as to prevent the purchase of it by intending colonists. It was divided into four categories :—

Baylick ; the undoubted property of the State at the time of the conquest.

Azel ; belonging also to the State, but let to natives from a more or less remote period.

Melk ; freehold, possessed by private persons with regular titles.

Arch or *Sabegha* ; land not subdivided into small holdings, but belonging in common to a tribe. Thus, though a tribe of a hundred people had a thousand acres of land, and each would possess ten, they had no particular ten, and might cultivate their proportion one year in the east and another in the west of the allotment. In many tribes the chiefs of the *Douars* hold in hereditary usufruct a great proportion of the land where they are settled. These allotments are called *Mechtas*, and are subdivided amongst *Khanès*, who, as their name implies, receive as their profit one-fifth of the crop. This collective possession of the soil has the effect of strengthening the tribal bonds under the power of its chief, but it prevents good cultivation or any hope of increased civilisation amongst the Arabs. They cannot be expected to spend more money or labour than is absolutely necessary in tilling lands from which they may be removed next year. They cannot plant trees or build permanent houses, without a certainty of being allowed to enjoy the fruit of their labour.

To remedy this evil, a most important law was passed on the 26th of July 1873, constituting individual property amongst the Arab tribes (it had already existed in Kabylia), and enabling each individual to sell the portion of common land to which he may be personally entitled ; but the application of the law is fraught with numerous difficulties, and it has made but little progress.

The female in Arab society occupies a situation similar to what she fills in all Mohammedan countries ; amongst the rich she is the slave of her lord's pleasure, amongst the poor she is the household drudge, and the manufacturer of almost everything required in daily use.

The national food of the Arabs (and indeed of the Kabyles too, under the name of *seksou*) is *couscous* or *täam*. This is simply the semolina of hard wheat granulated by a peculiar process, which is one of the special accomplishments of the women. It is placed in a perforated dish, and cooked by the steam ascending from another vessel below it, containing water, meat, vegetables, and aromatic plants, which are subsequently eaten with it. Very frequently the dish is eaten without meat, but with an extra allowance of butter, red pepper, tomatoes, etc. Milk is drunk at almost every meal, sometimes fresh, more frequently sour and curdled. In the larger towns, the Arab bread made in the shape of round cake is excellent, but amongst the tribes it is by no means appetising ; it is usually made of half-ground flour, sometimes of vetch, Indian corn, or other grain.

The head of the Arab is shaven except for a tuft of hair at the back, by

which he hopes to be drawn into paradise, and is always covered with the *haik*, bound round with cords of camel's hair and falling round the back and sides of his head and under the chin. He wears the white *burnous*, and occasionally a coloured one over it, slippers on his feet, or sometimes high red leather boots, and bare legs.

Moors.—The term Moor, as used at the present day, is one of European invention, and has no Arabic equivalent. It can have no other signification than that of a native of Mauretania, and as such could not properly be applied to the Arabs who overran the country and invaded Spain. The nearest Arabic equivalent to it is *Hadar*, applied to those of Arabic descent who have for generations lived in houses and towns, in contradistinction to the nomads who dwell in tents. In this sense the term Moor is used by the French, and includes all Arabs who lead a settled life, and occupy themselves in commercial pursuits rather than in agriculture. They are generally handsome, with oval pale faces, aquiline noses, and large dark eyes, and have rather an effeminate appearance. In intercourse with strangers they are polite and courteous; and in character, lazy and indolent to excess. They have very little occupation, being principally employed in embroidery, weaving, distilling perfumes, and attending to their bazaars.

The Moor's dress is conspicuous for its bright colours: it consists of a waistcoat and jacket, generally of silk, and ornamented with braid, and the *burnous*; the head, in the case of the younger men, is covered with the fez only, but this is supplemented in the elder by a turban. They wear voluminous trousers—not divided—of linen or of some soft woollen material extending below the knee, and slippers. Their women, when seen out of doors, are attired in a creamy white *haik* reaching below the knee, full white linen trousers fastened at the ankle, and slippers. Their heads and faces are covered, the eyes only being visible.

The Turks and Koulouglis.—The latter is the name by which the children of Turkish fathers and Moorish or slave mothers were known. The greater number of the Turks were sent back by the French on taking possession of Algeria, and their descendants have got mixed up in the general population, so that these races no longer exist in Algeria.

The Jews are said to have established themselves on these shores after the destruction of Jerusalem, but it is more probable that they did so on their banishment from Italy in 1342, and from various other countries during the following thirty years. Under the Turkish government they were permitted the free exercise of their religion, but were exposed to every species of indignity, and arbitrarily condemned to torture and death on the slightest provocation.

They are here much the same as in other parts of the world, the apparent aim of their existence being money-getting. The females, when young, are good-looking; but the men, although possessing handsome features, have not a prepossessing expression of countenance.

The elder members of the community still retain the native dress, the women wearing a straight silk gown and silk handkerchief bound tightly round the head, but the rising generation have adopted European costume,

since a decree of the Government of the National Defence in 1871 declared them French citizens.

The Jews are extremely conservative, and attached to their religious observances. A very remarkable ceremony still exists amongst them. When Charles V. appeared before Algiers there was a large community of Jews living on terms of tolerable harmony with the Mohammedans, and united to them by the bond of common hatred to the Spaniards. They viewed the approach of Charles V. with feelings of consternation, believing that his success over the Turks would be the prelude to their own persecution. They supplicated the protection of Heaven for themselves and the city of their adoption. When the Christian host was defeated they instituted a solemn feast, which has been observed annually in Algiers ever since.

Besides the above other races may be seen in Algiers—amongst them the **Beni M'zab**, a dark-skinned people from the Sahara, south of El-Aghouat. They belong to the **Ibadhi** sect, the most distinguished member of which is the Sultan of Zanzibar. Their women never leave their native oases. They wear an easily-distinguished, sleeveless garment of many colours, and are generally employed as butchers, sellers of fruit, vegetables, charcoal, etc. The **Negroes** are descendants of former slaves; they whitewash houses, and their women are sellers of bread; they are generally dressed in checked blue and white duster-material, and are conspicuous for their ugliness. The **Biskris** come from the neighbourhood of Biskra, and are employed as water-carriers, sweeps, etc.

§ 6. NATIVE LANGUAGES.

The native languages of Algeria are a corrupt form of Arabic, spoken by the Arabs, Moors, and Jews; and a dialect of the Berber used by the Kabyles and Chawia.

Written Arabic is the same everywhere, but the vulgar Arabic of Algeria is a patois contaminated by words and hybrid expressions borrowed from all the languages of Europe, a relic of the now extinct *lingua Franca*, mixed with others of Turkish and Berber origin, and simplified by the elimination of certain of the more complex grammatical rules, such as the dual number, the feminine of verbs and pronouns, etc.

The Kabyle language, though undoubtedly a dialect of Berber, is by no means a pure one; it is greatly mixed with Arabic, and already many French words have been introduced. Nevertheless, it exists over a vast extent of country; it is exclusively used in the Djurdjura, and amongst the Chaonia of the Aurès; but with certain differences of vocabulary, construction, and pronunciation, it is found over two-thirds of Morocco, and may be traced everywhere in the Sahara, almost as far as Senegal. It has no written character, and all the literature it possesses is transmitted orally. The Kabyles have also the peculiar habit of employing conventional languages, similar to thieves' slang in England, for the purpose of disguising their conversation in the presence of strangers. Nearly every profession has one peculiar to itself.

§ 7. GENERAL DESCRIPTION OF ALGERIA AND TUNIS.

This portion of North Africa, though still supposed to consist of two separate countries, one a French colony and the other a protected state, may now be treated as a whole, and the time is not far distant when even the nominal frontier will disappear, or at most exist as the limit between two departments of the mother country.

Algeria is bounded on the W. by the empire of Morocco ; it is comprised between long. $2^{\circ} 20'$ W. and $8^{\circ} 35'$ E. ; and between $37^{\circ} 5'$ and $32^{\circ} 0'$ N. lat. Its greatest length is about 620 miles ; its greatest breadth, 250 miles ; and its area is calculated to be about 150,000 square miles.

This area, however, is merely a rough approximation to the truth, as the southern limit of the country has never been defined with any degree of accuracy. The western boundary was fixed by the treaty with the Emperor of Morocco of the 18th March 1845. The *Oued Kiss*, opposite the *Zaffarine Islands*, was accepted as a starting-point, instead of the *Molouia*, the ancient *Malua* or *Molocath*, which from the remotest antiquity had been considered as the boundary between *Mauretania Cæsariensis* and *Tingitana*, the present empire of Morocco, and which is only separated from it by 12 kil. of sandy beach. An opportunity was also lost of securing the *Zaffarine Islands*, which were unoccupied at the time of the conquest, and which were taken possession of by Spain only a few hours before a French expedition sent from Oran with a similar object arrived at the spot. The actual French boundary runs from the *Kiss* in a south-easterly direction as far as *Ain Sfiassifa*, a little south of the 33rd parallel of latitude—a purely imaginary line. The scientific frontier, which the French hope one day to attain, would start from the mouth of the *Molouia*, follow the course of that river to the watershed of the country about 33° N. lat., and then continue along the course of the *Oued Gheir*, an important river, till its junction with the *Zouzfana*, a little north of *Igli*, between the 30th and 31st parallels of latitude. The district thus gained would contain the valuable strategic positions of *Oujda* and *Figuig*, and would be within easy distance of the great oasis of *Tafilalet*.

The French Sahara contains the oases of the *Oulad Sidi Cheikh*, the *Ksours*, the *Souf*, and lately the oases of the *Beni M'zab* have been annexed.

Provinces.—Politically Algeria is divided into three provinces or departments—Algiers, Oran, and Constantine. The first has 5 arrondissements—Algiers, Milianah, Médéa, Orleansville, and Tiziouzou. Oran also has 5—Oran, Mostaganem, Tlemçen, Sidi Bel Abbès, and Mascara. Constantine has 6—Constantine, Bône, Philippeville, Bougie, Guelma, and Setif.

The **Department of Constantine** forms the eastern part of the colony, from the border of Tunis on the east to the Department of Algiers on the west : it is separated from the latter by a line from Cape Corbelin (Ras Bezerka) between Dellys and Bougie, running southwards, by no means very straight or well defined.

This department contains the scantiest population of the three, but its soil is the most fertile, its minerals the most abundant, its forests the most extensive, and its climate the most varied. In extent it occupies more than

half the surface of Algeria, and its native population is much less nomad than that of the two other departments. The Berbers of the Aurès and Grand Kabylia occupy permanent villages, composed of stone houses, and are extremely attached to their native soils.

The **Department of Oran** occupies the western part of Algeria, and is contiguous to the empire of Morocco. The area of such portions of it as are capable of colonisation, including the Tell and part of the High Plateaux, is about 38,200 square kilomètres, or nearly 9½ millions of acres.

Its distinguishing feature is the very narrow extent of the Tell, not exceeding on the average 80 kilomètres.

The hills which run along the coast are not as a rule high. These are the *Dahra*, between Tenès and the Chélif; *Karkar*, or the Mountain of Lions, between Oran and Arzeu; *Mediouna*, between Oran and the Tafna. The most important mountain in the interior is *Djebel Amour*, in the Sahara.

The principal rivers are the *Tafna*, the *Macta*, the *Sig*, the *Habra*, the *Mina*, and the *Chelif*.

The country is rich, but much drier than the two other departments; consequently good harvests are rarer. It is full of mineral wealth and valuable marbles, and is the chief place whence *Alfa* fibre is exported.

The **natural divisions** of the country also are three, viz. the Tell, a strip of undulating cultivated land extending from the sea-shore to a distance varying from 50 to 100 miles inland; the High Plateaux; and the Desert of Sahara. The course of the **Atlas Mountains**, which approach within 30 miles of the city of Algiers, is from S.E. to N.W., their ridges sloping towards the Mediterranean, and enclosing several plains, such as the Metidja, lying between Algiers and Blidah, that of the Chélif, etc. They have a course of about 1500 miles, from Cape Nun, on the Atlantic Ocean, to which they give its name, to Cape Bon, in Tunis. In Morocco they rise in some places above the line of perpetual snow, the highest of them being estimated at from 11,000 to 12,000 feet. The Atlas range is not conspicuous for lofty peaks like the Alps, most of their summits being rounded.¹

The following are the highest points throughout the colony of Algeria:—

Chellia, in the Aurès range	7611 ft.
Tamghout Lalla Khadidja, Djurdjura range	7542 ,,
Djebel Ksel, in the Sahara	6594 ,,
Djebel Touilet Makna, in Djebel Amour	6561 ,,
Kef Sidi Omar, in Ouarsensis	6500 ,,
Babor, in the Kabylia of Bougie	6447 ,,
Ta Babort, contiguous to it	6465 ,,
Toumzait, near Tlemçen	6018 ,,
Dira, near Aumale	5934 ,,
Zakkar, near Milianah	5184 ,,
Edough, near Bône	3294 ,,

The **hydrographical system** of Algeria is by no means so simple as in other countries, where a system of rivers restores to the sea the water which

¹ For altitudes in Algeria see MacCarthy, *L'Année Géographique*, 1872, p. 76.

the sun has taken from it. Here a very small portion of the country is subject to the ordinary laws ; in the rest the waters either return to the clouds without passing through the sea, or circulate in vast subterranean lakes.

The watershed of the **Tell** is perfectly regular ; the sources of the principal streams are situated high up, either on its southern border or on the first terraces of the High Plateaux, and, in spite of the meanderings, often necessitated by the nature of the ground, they are generally short. The Chélif alone has a length of 244 miles, the next most considerable are the Mafrag and Seybouse, the Oued el-Kebir, the Makta and the Rummel, which during flood-time discolour the water for several miles at sea, and have not the strength in summer to force themselves a passage through the banks of sand accumulated in their estuaries by the currents along the coast.

Alluvial plains of any considerable extent are rare in Algeria ; they do not form, as elsewhere, in the estuary of a large river. Parallel to the sea, they stretch between the foot of the mountains and the isolated groups of hills, once probably islands, such as those at La Calle to the north of the plain of Tarf, Edough in the plain of Bône, the Sahel at Algiers, and the Mountain of Lions in the plain of Oran. Rivers traverse these without draining them, and any depressions in their surface are occupied by marshes and shallow lakes, either fresh or salt. The lakes of Oubeira and Tonègue near La Calle are sheets of fresh water, as were those of Oued el-Maiz in the plain of Bône, and Lake Halloula in the Metidja, now dry.

The most interesting part of the Tell is the great mountain range inhabited by the **Kabyles** ; this may be divided into two very distinct portions, the first comprising the lower part of the Oued es-Sahel, and which may be called the Kabylia of Bougie ; the second, the Kabylia of Djurdjura, which bounds the former on the west, and which is separated from it by the range whose majestic peaks, covered with snow during six months in the year, form such conspicuous objects in the landscape seen from Algiers. It extends as far west as the Col des Beni-Aïcha, or Menerville, 34 miles from Algiers.

Both speak the same language, a dialect of Berber, build villages, cultivate the olive and fig trees, and have many customs in common ; nevertheless, they have a totally different administration. The Kabylia of Bougie, like all the other valleys, has been subject to frequent invasions. The Turks, who substituted their rule for the ancient government of the country, introduced the system of great commandments, and imposed upon the vanquished, hitherto governed by their own customs, the orthodox jurisdiction of the Kadis.

The Kabylia of Djurdjura, bristling with savage and rugged mountains, had never before 1857 abdicated its independence. Entrenched in their villages, perched on the crests of almost inaccessible mountains, its inhabitants saw every attempt at invasion arrested at their feet, in the valleys of the Sebaou and Issers, unable to penetrate their country. The French conquest respected their institutions, which were of a democratic nature ; each village, though attached to its tribe by the bonds of a common origin, preserved its entire liberty of action, and formed a sort of political and administrative microcosm. In the village the power lay in the hands of all ; the

Jemâa (assembly) met once a week, and was composed of all men capable of bearing arms. It deliberated under the presidency of an *Amin*, elected every year by itself; it took cognisance of all questions, was sovereign judge, and enforced its own decisions.

Here, as amongst all Berber nations, were developed the institutions of *Sofs* (leagues), which divided each village, each tribe, and even each confederation. The *Sofs* do not represent any political party, like the majority and minority in a European nation. They do not originate in any theoretic ideas, and have not for their object the maintenance or overthrow of any particular form of government. They had their origin in the necessity for protection, and constituted before the conquest a mutual association, destined to cause the rights of an oppressed majority to be respected by a powerful and overbearing minority. The *Sof* lent its aid to such of its members as found themselves the victims of injustice; and if it could not obtain reparation or a peaceful settlement of the dispute, had recourse to force. Civil war broke out, and spread from village to village, and from tribe to tribe, and did not ordinarily stop without the intervention of one of the *Marabouts*. These are descendants of reputed saints, and owed to their origin and their neutrality an influence which they employed in re-establishing peace.

The French conquest, in substituting a regular power for the irregular action of these parties, and in repressing the appeal to arms, destroyed at a single blow the power of the *Sofs* and the influence of the *Marabouts*, already discredited by the very fact of the conquest. They had preached the Holy War, and promised victory in the name of the saints interred in their mountains, whose influence was to a great extent the cause of their own prestige. In the day of battle the most ardent of these *Marabouts* were compelled to flee, the infidel invaded with sacrilegious foot their most venerated shrines, their powerlessness was evident, and their influence disappeared. The religious confraternities, and especially that of Sidi Mohammed ben Abd-er-Rahman Bou-Koberain (he who has two tombs), began to exercise the power which the *Marabouts* had lost. The partisans of Kabyle independence, and the discontented of all classes, habituated to the strife of *Sofs*, and searching a new opening for their energy, rallied round an institution which flattered their pride by making them the equals of the *Marabouts*, and permitted them to rise to the highest grades despite their ignorance and obscure birth. The *Marabouts* constituted a caste, an aristocracy, based on the prestige of an extinct power. The order of Sidi-Mohammed, essentially of a levelling character, was admirably adapted to suit the democratic spirit of the Kabyles; it was, moreover, a national order, as the founder was born a century ago in their own mountains. The statutes of the order are cleverly framed to impose upon the brethren (*khouan*) the most absolute obedience, to surround them with mysticism, and to make them the devoted instruments of their chief. Soon the affiliated began to be counted by thousands in both sections of Kabylia, especially in the Oued es-Sahel, where, previous to the insurrection of 1871, dwelt the Sheikh el-Haddad, an old man, eighty-five years of age, almost paralysed, but possessing an unbounded influence over his followers.

This society was the more dangerous to the French, as its members, blindly obedient, could be excited to rebellion in a moment, without allowing the slightest precursory sign to reveal the danger, a result which actually happened during the insurrection of 1871.

That insurrection induced considerable modification in the ancient organisation of the Kabyle tribes, and freed the French from the engagements which they had contracted at the conquest of Kabylia to respect the laws and customs of the people. The base of that organisation was the village, or cluster of villages, which had a sovereign *Jemäa*, under the presidency of an *Amin*, elected by themselves; the union of several such communes formed the tribe, at the head of which was an *Amin-el-Oumena*, elected by the *Amins*. The new organisation destroys the power of the *Jemäa* and substitutes an *Amin* appointed by the French for one elected by the *Jemäa*. It replaces the tribe by the *Section*, composed of several tribes, and places the whole under the civil authorities and the common law.

The region of the **High Plateaux** extends longitudinally from E. to W., and is formed by vast plains separated by parallel ranges of mountains. These terraces increase in height as they recede from the Tell, and again decrease as they approach the Sahara, thus forming a double series of gradients, of which the highest is 3000 or 3300 feet above the level of the sea, much higher indeed than the summit of the hills which bound it. The spurs or projections from the mountains cut up each of these stages into a series of basins like the Hodna, in which the depressions are occupied by lakes, generally salt, known by the name of *Chotts* or *Sebkas*. This region is subject to alternations of intense cold and extreme heat; rain-water is less copious than in the Tell; instead of sea-breezes, it receives the hot blast of the desert, and it is entirely devoid of trees save on the south side of the high mountain ranges. During seasons of copious rain, however, and in places capable of irrigation, it produces abundant crops of cereals, but otherwise it presents to the weary eye of the traveller an unbroken stretch of stunted scrub and salsolaceous plants, on which browse the sheep and the camel, the wealth of the wandering Arab.

The disposition of the soil, and the existence of veins of permeable rock of a concave form, gave rise to the supposition that there existed subterranean sheets of water in several parts of the High Plateaux. Acting on this theory, artesian wells were sunk; and in many instances these brought to the surface copious supplies of water, which here is verdure and life.

Regular as is the general character of the High Plateaux, they still present several anomalies. On the southern border, the lower terrace, instead of forming a basin, presents here and there slopes, down which the water flows to the north, and thus becomes the source of several rivers in the Tell.

Towards the centre the basin of Sersou, filled of old by a vast lake, the traces of which are plainly visible, is now drained by the river Ouassel, which has forced itself a passage near Boghari, between the excavated plateau of Sersou and the foot of the last mountains of the Tell. On quitting the High Plateaux this river becomes the Chélif, the most important in Algeria.

Towards the south-east the basin which might have been expected to
[*Alaeria*]

exist is replaced by the immense mountain of Aurès, of which the central peak attains an altitude of 7611 feet. This protuberance takes the place of a depression; and, instead of a salt lake, we find a mountain covered with cedars and alpine vegetation. On the north the Aurès has only moderate slopes, which convey its waters into the Chotts of the neighbouring plateau. Towards the south it is prolonged almost in a straight line, and descends like a precipitous wall to the Sahara, which stretches at an immense distance below it.

In the west of Algeria the centre of the country bristles with mountains, which adjoin the great snowy range of **Deren**. The southern slopes give rise to immense rivers, amongst them the Oued Gheir, which the French expedition under General Wimpffen reached in the spring of 1870, and which, in their admiration, the soldiers compared to the Meuse.

The Sahara.—Popular belief pictures the Sahara as an immense plain of moving sand, dotted here and there with fertile oases; and the old simile of the panther's skin is still with many an article of faith. A few details are necessary to dispel this poetical but false idea.

The desert in Algeria consists of two very distinct regions, which we shall call the Lower and the Upper Sahara: this a vast depression of sand and clay, stretching on the east as far as the frontier of Tunis; that a rocky plateau, frequently attaining considerable elevation, extending on the west to the borders of Morocco.

The former comprises the Ziban, the Oued Gheir, the Souf, and the Choucha of Ouargla. On the north it is bounded by the mountain range of Aurès and the foot of the mountains of Hodna and Bou-Kahil; on the east it penetrates into the Regency of Tunis; on the south it rises in a slight and almost insensible slope towards the country of the Touaregs; and on the west it stretches in a point along the Oued Mia as far as Golea, after which it turns towards the north along the plateau of the Beni M'zab.

The Oued Gheir, the Souf, N'gouça, and the greater part of the Ziban, have a less elevation than 360 feet; Biskra and Ouargla are hardly higher, while the Chott Melghigh and part of the Oued Gheir are below the level of the sea.

The Chott Melghigh, which occupies the bottom of the depression, is sunk in the gypseous soil, and forms a sheet of water salter than the sea. It is of no great depth, and in summer, owing to evaporation, it is partly covered with a thick and brilliant coating of crystals; so that the eye can scarcely distinguish where the salt terminates and the water begins. The bottom is an abyss of black and viscous mud, emitting an odour of garlic, due possibly to the presence of bromides. Nevertheless, it is not without veins of more solid ground, forming natural causeways, on which the people of the country do not hesitate to trust themselves.

The rivers of the Aureseic system, essentially torrential in the mountains when confined within steep and narrow gorges, serve to irrigate the oases, where their waters are retained and absorbed by means of dams. That which percolates through these and forms streams lower down their courses is again absorbed by the *Sakias* or canals of irrigation. It is only after the copious

rains of winter, and the melting of the snow in the mountains, that their beds are filled, and their waters reach the Chott.

The smaller springs and streams which have their origin at the foot of the mountains are always absorbed by the oases or by the cereals which the inhabitants of the Ziban cultivate wherever a thread of the precious liquid is found.

On the west the Oued Djedi joins the Chott ; it rises on the southern slopes of Jebel Amour, fertilises the oases of El-Aghouat, and, skirting the plateaux of the higher Sahara, traverses the lower Sahara from west to east. It is only in the upper part of its course that this Oued is a permanent stream ; lower down its water is to a great extent dried up by the solar rays or absorbed by barrages ; the rest disappears in the permeable strata, or filters through the sand and flows along the clayey bottom which underlies it.

Like the rivers of the Aurès, but even more rarely than these, its course is only filled by the melting of the snows, or during the heavy rains on the High Plateaux.

The foregoing remarks apply equally to the other rivers which, rising in the eastern part of the higher Sahara, flow towards the region of N'gouça.

In the south the Oued Mia presents always the appearance of a dry water-course, below the sand of which water flows along an impermeable bed. The same may be said of the Oued Gghaghar, whose source, never yet visited by Europeans, is in the Touareg country.

From time immemorial artesian wells have existed here, and have everywhere spread with their waters life and wealth.

The water, which in the lowest part of the depression is found at a depth of 20 mètres, is, at the edges of the basin, 50, 60, or 100 mètres from the surface of the soil.

Its existence, however, is not only indicated by artesian wells ; throughout the whole extent of the Oued Gheir, and even to the south of it, depressions are found full of water, which appear to be, as it were, the spiracles of the subterranean lake ; they are styled by the natives *bahr* (sea) ; the French call them *gouffres*.

In the Souf the water circulates close to the surface of the soil, enclosed in a sandy substratum, which is concealed by a bed, more or less thick, of sulphate of lime, crystallised on the upper surface and amorphous in the lower part. One has only to penetrate this layer of gypsum to create a well.

When it is intended to plant a date-grove, the industrious *Souafa* remove the entire crust of gypsum, and plant their palms in the aquiferous sand beneath. Their green summits rise above the plain around, thus forming orchards excavated like ants' nests, sometimes 8 mètres below the level of the ground.

This complicated distribution of water in the lower Sahara gives rise to the different kinds of oases.

Running streams, dammed by barrages and distributed in canals, make the river oases (Ziban).

Water absorbed by permeable strata constitutes (1) the oases with ordinary

wells (Oulad Djellal, etc.); (2) oases with artesian wells (Tuggourt, N'gouça, Ouargla, etc.); (3) the excavated oases (Souf).

Sometimes two systems are found united in the same place.

The higher Sahara extends from the western limits of the lower one to within the frontiers of Morocco; to the south it reaches beyond Goleah, and on the north it is bounded by the last chains of the High Plateaux.

It is principally composed of rocky steppes, only the depressions between which are filled with sand.

Towards the east descends almost perpendicularly from north to south a large promontory which rises below El-Aghouat to nearly 2900 feet, and sinks gradually towards Goleah, separated from the plateau of Tademait by a sort of isthmus 1200 feet high. It is in this plateau that the Oued Mia and its affluents arise, which, in French territory at least, contain only slight infiltrations of water under a sandy bed.

In the centre the rocky plateaux fall rather abruptly, as far as the zone of the *Areg*, or country of sand-hills, occupying a depression, the bottom of which is about 1200 feet above the sea.

Finally, towards the extreme west, where the chains of the High Plateaux descend lower, the Saharan plateaux also descend farther south, leaving between them numerous valleys.

In each of these three divisions the water-system is different. The eastern promontory, the crests of which are directed towards the west, sends out no spurs towards the zone of the *Areg*; but it is furrowed towards the east by immense ravines, of which the principal bear the names of Oued Ensa and Oued M'zab. Rain seldom falls in the lower part; and the southern *crevasses* are almost always deep ravines, without water or vegetation. Even in the upper part it is only during severe storms, and when more than usually abundant snow has melted on the High Plateaux, that the waters pouring on the Sahara unite in the deep defiles, forming a mighty wave, which during twenty-four or forty-eight hours precipitates itself into the estuaries of the lower Sahara. When this torrent has passed, nothing remains in its dry bed save a few pools where the gazelle drinks, and a slight subterranean percolation which serves to supply the few wells at which the caravans draw water.

These periodical inundations are quite inadequate to supply the Beni M'zab, who have established gardens in the very beds of the great ravines which dominate their seven cities. In vain they treasure up a store in their reservoirs; they are obliged to have recourse to deep wells cut in the rock, which collect the infiltration of water in the calcareous strata.

Above the promontory it is only El-Aghouat and Ain Madhi, situated in a depression at the foot of the mountains, that can utilise almost at all seasons of the year, by means of barrages or dams, the upper waters of the Oued Djedi, which flow from east to west.

In the middle, Brezina and several oases placed at the very foot of the mountain range can also irrigate their date-groves with running water; but farther south the water flowing along the rocky plateaux encounters the moving sands of the *Areg*, which arrest its course and cause pools or marshes

(*Dhaya*), neither usually very large nor very deep. These little Chotts present the same phenomena as the greater depressions in the lower Sahara; their ancient banks, now quite dry, attesting a very marked decrease in the volume of their waters.

Towards the east, on the other hand, where the mountains in the plateaux rise to a greater height than 2900 feet, and present a vast surface, the ravines are the beds of veritable rivers, which render abundant irrigation possible, and, uniting in two principal streams, form the Oued Messaoud, which descends southwards to an unknown distance.

Such is the upper Algerian Sahara, of which the greatest depression does not descend to within 1300 feet of the sea, while in the lower one there is not a single point attaining that altitude. In the one the plateau is the prevailing feature, in the other the depression; here rocks abound, there they are entirely absent. As to moving sand, which the Arabs compare to a net, it occupies a sufficiently extensive zone in both regions; but still it does not cover one-third part of the Algerian Sahara.

§ 8. HISTORICAL NOTICE OF ALGERIA AND TUNIS.

The ancient territorial distribution of the native races in North Africa cannot be traced to a period much anterior to the Romans, as they were for the most part nomads; ancient geographers indeed divide them into certain great masses, such as Lybians, Numidians, Mauri, etc., but the limits of these were very indeterminate, though roughly approximating to the more modern divisions of the country.

The Phœnicians established on the sea-coast numerous cities, some of which were commercial *entrepôts*, others principalities founded by exiled members of their community, all, however, finding in commerce an inexhaustible source of riches and prosperity.

The word Africa was at first applied by the Romans to that portion of it with which they were best acquainted, the *Africa Propria*, or *Africa Provincia*, corresponding roughly to the Carthaginian territory erected into a Roman province after the third Punic war, B.C. 146. It was subsequently extended to the whole continent. The territorial subdivision of North Africa from Egypt to the Atlantic varied considerably at different epochs. The most eastern portion, the Cyrenaica, had its limits so clearly defined by nature that it varied little except in its form of government. It remained a kingdom till B.C. 74, when it became a Roman province. Then came the proconsular province of Africa, which included the *Syr̄tica Regio*, or that part of the coast from the Syrtis Major (*Gulf of Sidra*) and Syrtis Minor (*Gulf of Gabes*) or Tripolitana and Byzacena, the former representing the modern Tripoli, and the latter, with Zeugitana and the territory of Carthage, corresponding to the modern Regency of Tunis.

Then followed Numidia, corresponding to part of the French province of Constantine contained between the Tusca or *Oued ez-Zan* and the Ampsaga or *Oued el-Kebir*.

From Numidia to the Atlantic the country was known generally as Maure-

ania. About B.C. 46 it was divided into Mauretania Orientalis and Mauretania Occidentalis, separated by the river Molochath (the modern *Moulouia* near the frontier of Morocco). Subsequently, about A.D. 297, into Mauretania Setifensis, from Numidia to Icosium (*Algiers*); Mauretania Cæsariensis, thence to the Molochath, and Mauretania Tingitana; corresponding roughly to the French provinces of Algiers and Oran, and the empire of Morocco.

The interior region was divided into—

1. Lybia Deserta, comprising Phazania, the country south of the Cyrenaica and Syrtica Regio.
2. Getulia to the south of Numidia and Mauretania.
3. Æthopia and the Troglodytæ south of all these.

The word Mauretania was derived from its inhabitants, the Maurusii or Mauri, a branch of the great Berber nation, which extended from the Atlantic Ocean to beyond the banks of the Nile. Many conjectures have been made as to their origin. Sallust records that a great horde of Asiatics, led by Hercules, crossed over from Spain, and, on landing, inverted their boats and used them for houses, thus supplying the original model of the Numidian dwelling. Procopius asserts that in his time two pillars existed at Tangiers containing the record, "We fly from the robber Joshua, the son of Nun." The modern word *Zenata*, applied to the people of Berber origin who occupy the region between the desert and the High Plateaux, is merely the Arabic form of the radical from which *Canaanite* is derived. The Arabian geographers are unanimous in ascribing an Eastern origin to this people; but one thing is certain, that at a very early period the Phœnicians formed a number of colonies along the coast, the most important of which was Carthage, which created itself an imperishable name, and long disputed with Rome the government of the world.

Its origin is very obscure, but all the world knows¹ the beautiful fable of Virgil, how Dido or Elissa, daughter of Belus, king of Tyre, escaped from the power of her brother Pygmalion with the treasures for which he had murdered her husband; and, with a band of noble Tyrians who shared her flight, how she touched at Cyprus and carried off eighty maidens to be the wives of her followers, and then landed at a spot on the coast of Africa, near which Tunis and Utica (*the ancient*) were already built, marked out by nature as the site of a mighty city; how she entered into treaty with the natives, and purchased from them as much land as could be covered by a bull's hide, but craftily cut the hide into the thinnest of strips, and so enclosed a space of 22 stadia, on which she built her city, which retained its name of Byrsa (*Bull's hide*); how the city grew by the influx of people from the neighbouring country and by the adhesion of older Phœnician colonies, especially Utica; how its prosperity excited the envy of Hiarbus, king of the Lybians, who offered Dido the choice of war or marriage, and how to avoid both alternatives she stabbed herself on a funeral pyre which she had erected to the honour of her husband's memory.

¹ As the traveller does not generally carry with him a library of reference, the writer has not hesitated in this compilation to borrow largely from Gibbon, Smith, and other standard authorities.

The introduction of Æneas into the story is a poetic license on the part of Virgil, unwarranted by any authority in the original legend from which he derived his information. The real derivation of the word Byrsa is from the Phœnician word *Bozra*, a fortress; and Carthage was merely one, though the principal one, of many colonies founded by the Phœnicians, which itself subsequently sent out other colonies westwards, and spread in every direction the influence of its own high civilisation and commercial enterprise.

It is hopeless in such a work as this to attempt a detailed history of Carthage and the Carthaginians, to follow Hanno (B.C. 446) in his voyage to the Gulf of Guinea, Hamilcar (B.C. 481) in his disastrous expedition to Sicily, or the invasion of Africa by Agathocles (B.C. 310-306).

The **First Punic War** was a contest between Carthage and Rome for the possession of Sicily, and though virtually decided by the fall of Agrigentum (B.C. 262), the great resources of Carthage prolonged it twenty-three years later. It cost Carthage not only Sicily itself, but the dominion of the sea, and placed Rome more on an equality with her as a naval power.

The **Second Punic War** lasted from B.C. 218 to 201, and resulted in the utter prostration of Carthage, the loss of her fleets and of her possessions out of Africa.

A new and important State sprang up on the western confines of Carthage under Roman auspices, governed by Masinissa, ever ready to pick a quarrel with her, and give Rome a pretext for her destruction.

Masinissa was son of Gala, king of the Massylians, the easternmost of the two great tribes into which the Numidia of that day was divided. At the instigation of Carthage, his father had declared war on Syphax, king of the neighbouring tribe of Masæssylians, who had lately entered into an alliance with Rome. Masinissa was appointed by his father to command the invading force, with which he totally defeated Syphax. In B.C. 212 Masinissa was in Spain supporting the Carthaginians with a body of Numidian horse, and he shared in the defeat of Hasdrubal by Scipio at Silpia in B.C. 209.

After that battle he went over to the Romans, actuated, it is said, by resentment against Hasdrubal, who having first betrothed to him his beautiful daughter Sophonisba, subsequently bestowed her hand upon Syphax, who henceforth became a staunch ally of the Carthaginians.

After the death of Gala, and during the absence of Masinissa, the Massylian kingdom had become a prey to civil dissensions, in which, however, Syphax at first took little part; he was even disposed to acquiesce in the elevation of his old rival Masinissa to the throne, had not Hasdrubal warned him of the danger of such a course. But he yielded to the suggestion of the Carthaginian general, and assembled a large army, with which he invaded the territories of Masinissa, defeated him in a pitched battle, made himself master of the whole country, and established himself at the capital of Numidia, Cirta, the modern Constantine.

Masinissa now commenced a predatory warfare against his rival, in which he gained occasional advantages, and was still able to maintain himself in the field until the landing of Scipio in Africa, B.C. 204. Syphax supported

Asdrubal with an army of 50,000 foot and 10,000 horse, with which he acted at the siege of Utica. The whole of the Numidian and Carthaginian armies, however, were overthrown and destroyed by the Roman general, and Asdrubal himself and a few followers barely succeeded in escaping to Numidia, where, shortly afterwards, he fell into the hands of the Romans, and subsequently graced the triumph of his conqueror previous to ending his days in prison.

Masinissa, who had allied himself to Scipio, and had been instrumental in defeating his rival, obtained possession both of Cirta and Sophonisba. Scipio, however, demanded her as a prisoner of the Roman senate, whereupon Masinissa sent her a cup of poison, which she at once drank, merely remarking that she would have died with more honour had she not wedded at her father's command.

Scipio endeavoured to console Masinissa for his loss, and to recompense him for his services, and conferred on him the title and insignia of royalty, and the possession of his hereditary dominions, which honours were immediately ratified by the Roman senate.

About B.C. 203 Hannibal returned to Africa after his extraordinary campaign of fifteen years in Italy. He landed at Leptis, whence he proceeded to the city of Susa. Masinissa hastened to the support of his benefactor, and a decisive action was fought at a place called Naragara, not far from the city of Zama. Hannibal displayed all the qualities of a consummate general, but his elephants, of which he had great numbers, were rendered useless by the skilful management of Scipio, and the battle ended in complete defeat; he himself with difficulty escaped the pursuit of Scipio, and retired to Hadrumetum.

The hope of resistance was now at an end, and he was one of the first to acknowledge the necessity for peace. A treaty was concluded by which he saw the purpose of his life frustrated, and Carthage effectually humbled before her invincible rival. Even his wise administration could not save her; he was denounced by the opposite faction, proscribed by Rome, and forced to fly for refuge to Antiochus the Great, in Armenia, in B.C. 195, whereupon his kingdom came extinct, and the influence of Rome supreme, even within the limits of the empire.

Punic War.—Half a century passed without any further rupture between the two republics, but the elder Cato never ceased to denounce Carthage as a dangerous neighbour, and to represent her destruction as necessary to the permanence of the Roman power. His inveterate hatred proved triumphant, and war was declared.

The Carthaginians were divided by factions and intestine strife, and were unable to withstand the invaders. Still, for a time, Carthage stood firm.

But when (B.C. 146) Emilianus Scipio, the second Africanus, undertook the siege, operations were conducted with renewed vigour. At last the vast city fell into his hands, till at last only the great temple of Esculapius remained to be taken. It was defended by Asdrubal, who had about 900 followers. Asdrubal in the basest manner sacrificed his personal safety by deserting his post and surrendering himself to the Romans, and with him his wife and children, and the greater number of the defenders, perished.

scornfully refused to follow his example, and preferred setting fire to the building and perishing in the flames.

Scipio destroyed the ports and the fortifications of Carthage; some of the public buildings were burned by the inhabitants themselves; but it is probable that the destruction of the city was more apparent than real, and that, despite of the heavy curses pronounced on any who might attempt to rebuild it, it began to rise, to a certain extent, from its ruins, even before the time of the Gracchi (B.C. 116).

The whole coast of Africa, however, from Egypt to the Atlantic, became subject to the Romans. Carthage was stripped of her glory, and many of her inhabitants were driven elsewhere. The country generally fell back under the rule of its native governors, and Masinissa made Cirta his royal residence. He died in B.C. 148, leaving his throne to his son Micipsa.

In B.C. 116 a **Roman Colony** was established at Carthage by Caius Gracchus. It continued in a languishing condition till the time of Julius Cæsar and Augustus, when the city was rebuilt under the name of Colonia Carthago, and it continued the first city in Africa till a comparatively modern period. As the senate abstained from all endeavours to extend its conquests in Africa, the country enjoyed uninterrupted peace till the death of Micipsa in B.C. 118. He divided the kingdom between his two sons, Adherbal and Hiempsal, and his nephew Jugurtha. The last had already distinguished himself in Spain, under Scipio Africanus Minor, and was an ally of Rome; but on his having deposed and assassinated both his cousins contrary to the orders of the Senate, they declared war against him, B.C. 111. Albinus was first sent over to Africa, but he was probably bribed, and certainly defeated, by Jugurtha, at Suthul, and compelled to evacuate Numidia.

Q. Cæcilius Metellus was sent to succeed him as proconsul, B.C. 109. He was a man of stainless integrity and high talents; but though he compelled Jugurtha to deliver up a considerable quantity of treasure, arms, horses, and elephants, he was powerless to obtain possession of his person. He followed him to Thala, which stronghold he succeeded in taking after a siege of forty days; but Jugurtha succeeded in effecting his escape with part of his treasure, while the Roman deserters in his army, with the remainder of it, shut themselves in the palace, which they set on fire, and perished in the flames.

Marius, the legate of Metellus, and chief leader of the popular party in Rome, was elected consul in B.C. 107, and charged with the conduct of the war against Jugurtha. In the following year (B.C. 106) Jugurtha was surrendered to him by the treachery of Bocchus, king of Mauretania, and having subsequently adorned his conqueror's triumph, he was thrust into prison, where he died of starvation on the sixth day.

After this the crown of Numidia was given to Juba, son of Hiempsal, whose reign was short and troubled. Africa had now become the stronghold of the Pompeian faction. Pompey indeed was no more; but his two sons were here, Scipio, his father-in-law, Cato, Labienus, Afranius, and other devoted adherents, who all united with Juba in continuing the conflict in Barbary.

Cæsar himself came to Africa for the purpose of finally subduing the

Pompeian faction. His talents and good fortune produced their wonted effect. He landed at Hadrumetum (*Susa*) with a force of only 3000 foot and 150 horse. There he was joined by P. Sittius, a former accomplice of Catiline, who was well acquainted with the country and the native tribes. Having failed to take this city, he marched to Ruspina (*Monastir*), and shortly after (B.C. 47) ensued the great and decisive battle of Thapsus (*Ras Dimas*), in which the Pompeian party was utterly defeated, with a loss of 10,000 men. Cæsar then took Utica, where Cato, who commanded it, committed suicide. Scipio also killed himself. Afranius was killed by Cæsar's soldiers. Labienus, Varus, and the two sons of Pompey escaped into Spain. King Juba set out for Zama with his friend Petreius. There he had collected all his household and treasures, and hoped to perish with them; but, being refused admittance, he and Petreius agreed to fight together, so that one at least might fall with honour. Petreius was quickly killed, and Juba, having in vain essayed to make away with himself, got a slave to despatch him.

Bocchus and Bogud, kings of Mauretania, who had alternately fought under the banner of the two great rivals, also lost their lives, and their dominions, and thus the whole of North Africa fell into the power, and became an integral portion, of the Roman Empire.

Numidia was placed (B.C. 46) under the government of Sallust, who plundered the country in a merciless manner to enrich both himself and his patron, but who did good work for posterity by collecting materials for his celebrated history of the Jugurthine wars. Cirta, the capital, was made a colony to recompense the partisans of Publius Sittius, who had rendered Cæsar such important services, and it was named Cirta Sittianorum or Cirta Julia, which names it retained until the beginning of the 4th century.

But though Africa was thus reduced to the condition of a Roman province, the emperor knew better than to confide the government of these turbulent countries entirely to Roman officers.

The young Juba had been carefully educated at Rome, where he attained a high literary reputation. He is frequently cited by Pliny, who describes him as more memorable for his erudition than for the crown he wore. Plutarch also calls him the greatest historian amongst kings.

In the year B.C. 26 Augustus, wishing to give to the people of the late monarch a sovereign of their own race, fixed upon this son of Juba. He married him to Selene, daughter of Anthony and Cleopatra, and restored to him the western portion of his father's dominions, trusting to his thorough Roman education to secure his submission, and on the prestige of his race and name to win the affections of the Numidian races, and to hasten their fusion with the conquering nation.

He removed his capital to the ancient Phœnician city of Iol, to which he gave the name of Cæsarea.

He died in A.D. 19, leaving a son, Ptolemy, the last independent prince of Mauretania, who was far from sharing the high qualities of his father.

His reign was characterised by debauchery and misgovernment, and the Mauretians were not slow to rise in revolt under the leadership of Tacfarinus. This war lasted for seven years, shortly after which Tiberius died, and was

succeeded by Caligula, who summoned Ptolemy to Rome, and, after having received him with great honour, caused him to be killed, as he thought that the splendour of his attire excited unduly the attention of the spectators. It is more likely that he desired to appropriate the wealth that Ptolemy was known to have accumulated. This murder was followed by a serious revolution in Mauretania, which lasted several years.

The whole country, which heretofore had comprised sundry kingdoms, states, and principalities, henceforth became provinces of the Roman Empire, governed by prætors and proconsuls, who seemed to have farmed it very much for their own benefit, and to have submitted the inhabitants to the utmost amount of exaction which they were able to bear.

Sometimes their complaints reached the senate, as in the case of the proconsul Marius Priscus and his lieutenant Hostilius Firminus, in the reign of Trajan, who were prosecuted before the Emperor himself by Tacitus and Pliny the younger, and condemned to exile.

The next 300 years were the most prosperous in the history of North Africa, and it is to this epoch that most of the splendid remains still existing in Algeria and Tunis belong. The African provinces were most important to the empire, which drew from them its richest stores, and had little to pay for defence. The details, however, which have reached us of this epoch are of the most meagre description. Insurrections were of frequent occurrence, and the peace of the country was only the more troubled by the **Introduction of Christianity**, the lawless and hot-blooded natives ranging themselves on the side of the various sects, and constantly resorting to violence to maintain their views. Thus, though they contributed some shining names to the army of martyrs, they helped far more to swell the bands of the persecutors.

One of the insurrections amongst the native tribes was suppressed by Hadrian in person (122) when he came to visit this portion of his dominions. He made a second visit to Africa three years later (125), when he bestowed many important benefits on the province, such as the aqueduct of Carthage, and the great road thence to Theveste.

The Moors continued to trouble the public peace in the reign of Antoninus, who drove them into the Atlas, and compelled them to sue for peace (138). But they broke out once more under Marcus Aurelius, and actually pushed their incursions across the Mediterranean into Spain (170).

On the accession of Septimius Severus (173), himself an African, a native of Leptis, he sent troops over to prevent his rival Pescennius Niger from taking possession of the proconsular province. Macrinus, who attained the purple by the murder of Caracalla (217), was a native of Mauretania Cæsariensis. Elagabalus, who succeeded him (221), was a son of Sextus Varius Marcellus, formerly governor of Numidia, and commandant of the Third Legion, Augusta, at Lambessa. It appears as if Africa had the privilege at this time of conferring the purple, if not on its actual children, at least on those who made it the country of their adoption. The case of the Gordians offered a striking example of this.

Gordian the elder, who in 229 had been the colleague of Alexander Severus in his third consulate, was sent in the following year (230) by the Senate as

proconsul to Africa, and his son was subsequently appointed, by the same body, his lieutenant. Several years passed in peace under his government, when the murder of Alexander Severus (235) and the accession of the brutal Maximinus completely changed the aspect of the country.

A more rigorous procurator sent by him was killed by the Africans, who compelled Gordianus to accept the purple, which he did at Thysdrus in February 238, he being then more than eighty years of age. His son was also declared Emperor conjointly with him, and as soon as they had appeased the first tumult of election, they removed their court to Carthage, and sent a deputation to Rome to solicit the approbation of the senate. This body warmly espoused their cause, but before their confirmation was known in Africa the Gordians were no more.

Capelianus, governor of Mauretania, with a small force of veterans, and a great host of barbarians, marched upon Carthage. The younger Gordian sallied out to meet him; but his forces were quite undisciplined, and his valour only served to obtain for him an honourable death on the field of battle. His aged father, whose reign had not exceeded thirty-six days, put himself to death on the first news of the defeat (March 238), whereupon Carthage opened its gates to the conqueror. The death of Maximin took place in the same year. Maximus and Balbinus were very soon after slain by the soldiery, and the grandson of the aged Gordian was carried to the camp, and saluted as Emperor. He in his turn was assassinated by his army in Mesopotamia before he had attained the age of nineteen years, in March 244.

Gibbon observes: "While the Roman Empire was invaded by open violence or undermined by slow decay, a pure and humble religion gently insinuated itself into the minds of men; grew up in silence and obscurity, derived new vigour from opposition, and finally erected the triumphant banner of the Cross on the ruins of the Capitol."

Nothing is certainly known of the **African Church** till the end of the 2nd century. The 3rd century, however, was its time of greatest trial and glory. Its members seemed endowed with the greatest fervour and devotion, and the most extravagant honour was attached to the outward acts of martyrdom and confessorship.

The names of 580 sees between Cyrene and the Atlantic have been handed down to us by ecclesiastical historians. But its greatest glory is to have produced three men, Tertullian in the 2nd century, Cyprian in the 3rd, and Augustine in the 4th.

The most celebrated martyr of the African Church was Cyprian, Bishop of Carthage, who was beheaded by order of the proconsul Galerius in 257.

In the year 296, under the government of Diocletian, Maximian, Galerius, and Constantius, the whole of Africa from the Nile to the Atlas was in arms. A confederacy of five Moorish nations issued from their deserts to invade the peaceful provinces. Maximian, in whose special charge Africa was, hastened to the scene of insurrection, and the progress of his arms was rapid and decisive. He vanquished the fiercest barbarians of Mauretania, and removed them from their mountains, the reputed strength of which had inspired them with a lawless confidence.

In the early part of the reign of Constantine arose the schism of the Donatists, which, though springing from small beginnings, grievously afflicted both Church and State for upwards of a century.]

Mensurius, Bishop of Carthage, dying in 311, the greater part of the clergy and people chose in his place the Archdeacon Cæcilianus, who, without waiting for the Numidian bishops, was at once consecrated by those of Africa alone. The Numidian bishops, who had always been present at the consecration of a bishop of Carthage, were highly offended at being excluded from the ceremony, and summoned Cæcilianus to appear before them to answer for his conduct. On his refusal, they held a council, declared him unworthy of the episcopal dignity, and chose Majorinus, his deacon, as his successor in office.

The most violent of these Numidian bishops was Donatus, of Casæ Nigræ, from whom some have supposed that the whole faction was named; but there was another prelate of the same name, who succeeded Majorinus at Carthage, and received from his sect the name of Donatus the Great: hence it has been a question from which of these the name was derived.

The controversy spread rapidly through all the provinces of North Africa, which entered so zealously into the ecclesiastical war that in most cities there were two bishops, one at the head of Cæcilianus's party, and the other acknowledged by the followers of Majorinus.

The Donatists brought this controversy before the Emperor Constantine in 313. After three separate inquiries, the case was given against them, and the Emperor deprived the Donatists of their churches, and sent their seditious bishops into banishment. They, however, resisted his decree, and retired in large numbers to the Atlas Mountains. In 348 they defeated an army sent for their forcible conversion, and remained for a century the scourge of the neighbouring provinces, being urged by frantic fanaticism to constant revolts and ravages.

In 326, when the whole empire was united under the sceptre of Constantine, that monarch constituted four prætorial prefectures, and Africa was comprised, with Italy and the intermediate islands, as one of these great territorial divisions. In the distribution which he made of his empire in 335, Africa was given to Constans, together with Italy and Illyria.

Valentinian succeeded to the empire in 364, and apportioned the East to his brother Valens, reserving the West to himself. Africa was at this time in a deplorable condition of anarchy, aggravated by the feebleness and rapacity of its governor, the Count Romanus. Leptis and Tripoli were sacked by the Asturians, and Ruricius, the governor of the latter city, was executed on a false charge at Setifis.

The insurrection of Firmus, chief of one of the most influential tribes of the Mauri, caused the emperor to despatch Count Theodosius for its repression in 369. Romanus was sent in disgrace to Rome, but it was not till after a long and harassing series of campaigns that Firmus, driven to extremity, committed suicide, and Theodosius returned in triumph to Setifis.

On the death of Valentinian, on the 17th November 375, the sceptre of the West remained in the hands of his son Gratian, with whom his brother

Valentinian II. was associated as colleague. Africa was apportioned to the latter, a child of four years of age. Maximus obtained the throne by putting Gratian to death in 383, and in 388 was recognised in Africa, which he exhausted by his exactions. Theodosius, who had succeeded Valens in the East, put him to death, and eventually reunited the whole empire under his sceptre, in which condition it remained till his death in 395, when it was divided between his two sons, of whom the younger one, Honorius, became the Emperor of the West, and of Africa, under the tutelage of the celebrated Vandal captain, Stilicho.

At this time Gildon was military governor of Africa, which had groaned under his yoke for twelve years; not daring to declare himself actually independent, he attempted to effect the same result by placing himself under the protection of the Empire of the East (397); but Stilicho was not of a character to suffer this disguised defection, and having in his employ an irreconcilable enemy of Gildon in his brother Masezel, whose children the former had recently put to death, he entrusted to him the command of a body of troops, which landed in Africa, attacked Gildon between Theveste (*Tebessa*) and Ammaedara (*Hydra*), and utterly defeated him. Gildon, abandoned by his followers, embarked on board a vessel to seek a refuge in the East, but being driven by contrary winds into the harbour of Tabarca, he was taken prisoner, and put an end to his life by hanging himself in 398.

Africa returned to its allegiance to Honorius, and the post which Gildon had occupied of *Magister utriusque militiæ per Africanam* was suppressed, and a new system of separate civil and military government was organised.

But the period was when administrative reforms could have any effect, and the country, weakened by so many disturbances between opposing sects and races, became an easy prey to the enemies now pressing the Roman Empire on every side. The opportunity for invasion was given during the minority of Valentinian III. through the jealousy of the two great pillars of the State, Ætius and Boniface. The former, enraged at his rival being appointed governor of Africa, brought false charges of disloyalty against him, which at last drove Boniface into the very acts of treason of which he had at first been unjustly accused. He called to his assistance **Genseric, king of the Vandals** in Spain, who landed in Africa A. D. 429, and was speedily joined by troops of native Moors and the wild bands of the Donatists. With these formidable allies he marched through the country, devastating it on every side. In spite of the late repentance of Boniface, he seized the six Roman provinces one after another, and in 439 Carthage, which had been again restored to the position of the second city of the West, fell into his hands.

Genseric now commenced to consolidate his power in Africa. In order to prevent the Romans from attaining any footing in the country he destroyed nearly all the fortresses which they had built. Born a Catholic, he embraced the Arian heresy, and persecuted his former brethren with all the malignant zeal of an apostate, and he gave, by his maritime expeditions, a new turn to the wild spirit of his people, who were the earliest predecessors of those pirates and corsairs that were the scourge of the Mediterranean before the French conquest.

Procopius, the historian of Justinian's wars against the Vandals, relates of Genseric that his orders to his steersmen were: "Turn your sail to the wind, and it will lead us against the objects of God's anger." He ravaged the coasts of Sicily and Italy, and in A.D. 455 enjoyed a fourteen days' sack of Rome, bringing back immense treasures and 60,000 prisoners.

Amongst these treasures were the golden candlesticks and the holy table of the temple, brought to Rome by Titus; these were afterwards rescued by Belisarius, taken to Constantinople, and sent by Justinian to the Christian Church at Jerusalem, after which there is no record of their fate.

In 476, after a vain attempt to re-conquer the African provinces, the Eastern Empire was obliged also to humble itself before the Vandals, by securing to them in a treaty Sardinia, Corsica, the Balearic Islands and Sicily.

Genseric died A.D. 477; and under his successors the rough Northmen fell into the luxurious habits of the Romans they had conquered, and the **Byzantine Empire** took advantage of the first pretext for a fresh invasion. This was offered in the reign of Justinian, when Gilimer, having deposed his relative Hilderik, assumed the crown of Africa. A large fleet and army were sent from Constantinople under command of Belisarius, who landed at Carthage in A.D. 533. He completely routed the Vandal forces on the first encounter, and compelled their sovereign to flee for refuge to Numidia. For a time Gilimer retrenched himself in Mons Papua (*Edough*), near Bône, but he was soon compelled to surrender, and was carried by his conqueror to Constantinople, near which he remained in honourable retirement for the remainder of his life. Belisarius was succeeded in Africa by the most illustrious of his generals, the eunuch Solomon, who restored all the most important strongholds, and after a short and brilliant career was killed before the walls of Tebessa in a fruitless endeavour to repress an insurrection of the warlike Berber hordes of that neighbourhood. The Vandal power was destroyed, but that of the Byzantines was never thoroughly established; it rested not on its own strength but on the weakness of its enemies. The soldiers of the lower empire held, it is true, the towns on the coast and many important fortresses, but the fertile plains were in the hands of the native races, and in many places became desert in consequence of the tremendous decrease in the population caused by successive wars.

In the next century the country suffered invasion from a new quarter.

In the twenty-seventh year of the Hejira (A.D. 647) the Khalifa Othman determined to effect the conquest of Africa, and on the arrival of the Arab army in Egypt a detachment was sent on to Tripoli. The Patrician Gregorius was at this time governor of Africa. He had been originally appointed by Heraclius, Emperor of the East, whose father had held the same office, and who himself had started from Africa on the expedition which resulted in the overthrow of the Emperor Phocas and his own elevation to the purple. Gregorius subsequently revolted from the Byzantine Empire, and by the aid of the native Africans made himself independent sovereign of the province.

Ibn Khaldoun says that his authority extended from Tripoli to Tangiers, and that he made Suffetula (*Sbeitla*) his capital.

The command of the expedition was given to the brother of the Khalifa, Abdulla Ibn Sääd, under whose orders were placed the *élite* of the Arab troops, to whom were added 20,000 Egyptians. The number of the whole force did not certainly exceed 40,000 men. On entering the country occupied by the Romans, the Arab general sent on a detachment to Tripoli commanded by Ez-Zohri. On their arrival before the city they found it too strong to be carried by assault, and they continued their march to Gabes.

A message was sent to Gregorius offering him the usual conditions—to embrace Islamism or to accept the payment of tribute, both of which he indignantly refused. The invaders continued their march till they met the Byzantine army on the plain of *Acouba*, situated about a day and a night's march from Sbeitla.

The army of Gregorius is said to have numbered 120,000 men, but this immense multitude was probably composed of naked and disorderly Moors or Africans, amongst whom the regular bands of the empire must have been nearly lost.

For several days the two armies were engaged from dawn till the hour of noon, when fatigue and the excessive heat obliged them to seek shelter in their respective camps.

The daughter of Gregorius, a maiden of incomparable beauty, fought by her father's side; and her hand, with 100,000 dinars, was offered to whomsoever should slay Abdulla Ibn Sääd. The latter retaliated by offering the daughter of Gregorius and 100,000 dinars to any one who would slay the Christian prince, her father. The combatants had been in the habit of discontinuing the battle every day at noon, but on one occasion the Mohammedan leader, having kept a considerable portion of his troops concealed and in reserve, recommenced the action with these at mid-day, and utterly defeated the Christian force. Gregorius and a vast number of his followers were killed, the camp was pillaged, and the beautiful daughter of the prince was captured and allotted to Ibn ez-Zobeir, who had slain her father.

Shortly afterwards Ibn Sääd and his followers returned to the East laden with spoil; their invasion had been a purely military one, and they were unencumbered either with women or cattle.

In 665 Moaouia ben el-Hodaj brought another army from the East, and on this occasion the Mohammedans retained what they again conquered, and the province of *Ifrikia* was formed and placed under the command of Okba bin Nafa. The Moors and the Berbers adopted without trouble the name and religion of the Arabs; and fifty years afterwards a Mussulman governor reported that there was no longer cause to raise the tax imposed on Christian subjects. Thus was swept away the African Church, which had been adorned by the names of Augustine, Tertullian, and Cyprian.

In the reign of the Khalifa Walid, A.D. 711, on the invitation of Count Julian, governor of Ceuta, and the small part of the country held by the Visigoths of Spain, the Arabs advanced farther west, and the valiant General Tarik, landing at Gibraltar (*Jebel Tarik*), carried the Crescent into Europe. Multitudes of the Moors followed the Arabs into Spain, and the Europeans gave the African name to their Asiatic conquerors.

During the next century the provinces of Africa were under the rule of Emirs appointed by the Khalifas. They made their capital at Kerouan in Tunis, and were constantly employed in struggles with the Arab governors and Berber chieftains who ruled under them. In 800 hereditary power was conferred by Haroun er-Rashid on Ibrahim, son of Aghlab, and eleven of his descendants reigned after him, till in 910 a powerful rival rose among the Berbers who inhabited the province of Constantine. This was Abou Mohammed Obeid-Allah, who claimed to be a descendant of Fatima, daughter of the Prophet, and, surrounded by mystery and marvellous legends, he soon overthrew the Aghlabites; and his successors, pushing their conquests farther east, established the dynasty of the Fatimite khalifas at Cairo. In 944 Ziri, governor of Ashir, one of the provinces of Central Mogreb, built the town of Algiers; and the khalifa assisted him to establish an hereditary throne for his race, which ruled until Rodger, king of Sicily, took Tripoli from Hassan Ben Ali, and the dynasty of the Zirites came to an end. The Hammadites, a branch of the same family, held the province of Constantine; and the Moravides, or *Marabatin*, a tribe of military saints from the south, seized Oran and invaded Spain, 1055.

About this time occurred the **great Arab Immigration**. It was no brilliant and ephemeral conquest, like that of Sidi Okba: the land was overrun by a foreign people, who speedily absorbed the Berber nation or drove the remains of it into the mountains. The tribes of Hilla and Soleim had inhabited the deserts of the Hejaz, where they existed as much by brigandage as by the produce of their flocks. When the Fatimites undertook the conquest of Syria, they encountered the most determined resistance from these tribes. Subsequently El-Aziz had them banished to Upper Egypt, whence they soon found their way into, and overspread the whole country between Egypt and the Atlantic. Ibn Khaldoun, speaking of these nomads, likens them to a cloud of locusts, destroying everything over which they passed. Their lawless character soon caused them to be expelled from all the great centres of habitation, whereupon they took to the country, where their descendants exist in the same nomad condition at the present day.

The Moravides of the West were displaced by the Almoahades (*El-Moahidin*, those who attest the unity of God), another sect of warriors who arose in the mountains of Morocco, conquered the Hammadites in 1153, and drove the Sicilians from Tripoli in 1160. The Almoahades remained in power till 1270, their capital being Tlemçen; they were then overthrown by the Beni-Zian, a desert tribe, who in a short time obtained possession of the whole of Central Moghreb, with the exception of the larger coast towns, which succeeded in maintaining themselves as independent powers.

One of the most important of these was **Algiers**, built on the site of the ancient town of *Icosium*. This name does not often occur in history. Pliny, however, mentions that the Emperor Vespasian created it a *Latin* city,—a title somewhat higher than Italian and less than Roman.

During the Christian epoch mention is made of a Donatist Bishop of Icosium, Crescens, in 411, and of another, Laurentius, in 419, the latter of whom was one of the three legates from Mauretania *Cæsariensis* sent to the

Council of Carthage. Nevertheless, it was a city of no great importance, probably a mere station between the more considerable cities of Iol and Rusgunia.

In the 10th century of the Christian era Bologguin, son of Ziri, was authorised by his father to found three towns, viz. Milianah, Lemdia (now Médéa), and *El-Jezair Beni-Mezghanna* (meaning "The Islands of the Children of Mezghanna"), abbreviated to *El-Jezair* (Algiers), which last was founded in the year 944.

In 1067 El-Bekri mentions it as then containing many splendid monuments of antiquity, some of which were brought to light in digging the foundations of the modern city; but scarcely anything, with the exception of a few inscribed stones, has been preserved: one of these, however, bears the important word *Icositanorum*.

Almost since the foundation of Algiers an uneasy feeling existed regarding the part she was destined to play in the world's history. The Spaniards were seriously occupied in attempting to drive the Moors from their own country, but as soon as they became aware of the rising importance of this city (in 1302), they despatched four vessels to reconnoitre it; finding it simply a fortified enclosure, without any commerce, they contented themselves with taking possession of a small island in front of the harbour, subsequently called the *Peñon* or *Borj el-fanal*. During the next eighteen years commerce began to spring up, and the Spaniards themselves were well content to find a market at their doors whence they could draw their supplies.

In 1342 the Jews were expelled from Italy, in 1380 from Holland, and from many other countries about the same period; it is possible that they contributed to increase the population, and to extend the trade of the infant city.

After the expulsion of the Moors from Spain (1505), they sought an asylum on the coast of Africa, but they could not long remain there in peace, and very soon adopted the profession of pirates, seeking thus to harass their hereditary enemies and ruin their commerce. To stop their depredations Ferdinand V. prepared a descent on the coast of Africa. On the 15th of September 1505 Don Diego of Cordova took possession of Mersa el-Kebir, and four years later, on the 18th of May 1509, the Cardinal Ximenes, who had instigated Ferdinand to undertake the war, came in person to direct the siege, and take possession of the town of Oran. The king himself lacked funds for the enterprise; but these were supplied by the Cardinal; and the expedition, in consequence, gained the name of the "Crusade of Ximenes de Cisneros," and was regarded as a holy war, all who fought in it having indulgence from certain fast days for the remainder of their lives. After the capture of Oran, Cardinal Ximenes charged Don Pedro Navarro, who had rendered important services during the expedition, to take possession of several ports on the littoral which had been in the habit of welcoming and protecting the Moorish pirates. On the 1st of January 1510 he set sail for Bougie, which he took without much difficulty. Dellys, Mostaganem, and Tlemçen, not being in a condition to offer any serious resistance, became tributary to Spain.

Algiers also consented to pay an annual tribute, and to promise that corsairs would not be permitted to enter the harbour or dispose of their plunder in the town. To ensure these conditions he built a fort on the Peñon, part of which still exists, and serves as base to the lighthouse.

About this time (1510) commenced the remarkable career of the brothers Barbarossa, as they are usually styled by Europeans, but not, as is supposed, from the red colour of their beard; the word is merely a corruption of the Turkish name of the elder brother **Baba-Arouj**, who and **Kheir-ed-din** were sons of Yakoot Reis, captain of a galley belonging to the island of Mytelene; according to others of a potter there. They associated themselves with a number of other restless spirits, and soon found themselves at the head of a piratical fleet, consisting of twelve galleys and many other smaller vessels, with which they came to seek their fortune on the coast of Barbary.

On entering Tunis with a cargo of plunder and slaves, they made magnificent presents to the reigning prince Mulai Mohammed, of the dynasty of Beni Hafes, and obtained permission to establish their headquarters in his dominions.

As we have said, the town of Bougie was at this time occupied by the Spaniards, and one of their first exploits was to try to recover it for the Mohammedans; they attacked it, but without success, in 1512, on which occasion Arouj lost an arm.

Two years later (1514) they took Djedjeli from the Genoese, capturing 600 slaves and an immense amount of booty.

The renown which the brothers had acquired in fighting against the Christians induced the Emir Salem ben Teumi of Algiers (1516) to implore their assistance to dislodge the Spaniards from their position on the Peñon. Arouj gladly accepted the invitation, and, leaving his brother with the fleet, marched on Algiers with a force of 5000 men. He was hailed as a deliverer, but he soon made himself master of the town, put Salem ben Teumi to death, and proclaimed himself king of Algiers in his stead.

In 1517 he occupied Médéa and Tlemçen, which places he added to his dominions. At the same time his fleets continued to infest the coasts of Spain and Italy, and so frequent and cruel were their devastations that Charles V. at the beginning of his reign (1518) despatched a body of troops to the governor of Oran sufficient to attack him. At first Arouj shut himself up in the Mechouar of Tlemçen, but being forced to evacuate it, and being hotly pursued by the Spaniard Martin d'Agole, he died on the banks of the Rio Salado or river of Oujda, about 92 kil. west of Oran, in the country of the Beni Moussa.

Kheir-ed-din succeeded his brother, but, seeing himself menaced by the Spaniards on the one hand and by the native Algerians on the other, he placed himself under the suzerainty of the Sublime Porte, and was named Pasha by Selim I. He afterwards defeated, near the Balearic Islands, the Spanish Admiral Portundo, and in 1530 captured the Fort Peñon, which the Spaniards had held for thirty years, and put its governor to death.

He connected it to the mainland by a mole, in which work 30,000 Chris-

tian slaves were employed for three years, and surrounded the town with a wall.

Kheir-ed-din now (1518) conceived the project of taking possession of the kingdom of Tunis, by far the most flourishing country at that time on the coast of Africa, and the state of intestine strife prevailing there opened to him an easy means of effecting his purpose.

Mulāi Mohammed, the last prince of the Beni Hafes dynasty, which had existed in an uninterrupted line for three centuries, died in 1525, leaving a numerous family of sons by different wives. Mulāi Hassan, one of the youngest, owing to the intrigues of his mother, had been chosen as his successor. It is alleged that he poisoned his father. Certainly he put to death all those of his brothers whom he could get into his power; but Reshid, one of the oldest, succeeded in escaping to the Arabs in the interior, and with their support for a long time disputed his brother's right to the throne.

He eventually took refuge at Algiers, and implored the protection of Kheir-ed-din, who, seeing the great advantage which might accrue to himself by supporting his title, received him with every mark of friendship and respect. He easily persuaded Reshid to accompany him to Constantinople, and induced Sultan Soliman to equip an expedition for the conquest of Tunis, which done, the unhappy Reshid was thrown into prison, whence he never again emerged.

After ravaging the coast of Italy, the fleet anchored at Bizerta, where it was warmly received; the inhabitants even proposed to co-operate with him, but their offer was not accepted, and Kheir-ed-din proceeded without loss of time to the Goletta, the fort at which place soon fell into his hands. He gave out that the object of his appearing on the scene was to reinstate Reshid on his father's throne, on which the inhabitants of Tunis, weary of Mulāi Hassan's government, expelled the latter from the city, and opened their gates to his brother. But when the new prince did not appear the people began to suspect the corsair's treachery. Kheir-ed-din did not leave them long in doubt, but informed them that the Beni Hafes had ceased to reign, and that he had come in their place as representative of the Sultan. The inhabitants flew to arms, and surrounded the citadel into which Kheir-ed-din had led his troops; but he had foreseen such an attack, and was not unprepared for it, and the artillery on the ramparts soon overpowered the ill-directed musketry fire of his assailants, and compelled them to retire with a loss, it is said, of 3000 killed.

His first care, after having taken possession of Tunis, was to put his new kingdom in a proper state of defence. He strengthened the citadel which commanded the town, fortified the Goletta in a regular manner at vast expense, and made it his principal arsenal and the station of his fleet. He won over the warlike tribes of the Drid and Nememchas by liberal presents, and succeeded in introducing a Turkish garrison into the holy city of Kerouan, the second capital of the country.

Mulāi Hassan fled for safety to Constantine (1535), where he made the acquaintance of a renegade Genoese, named Ximea, by whose advice he demanded the aid of **Charles V.**, and engaged to second his operations with a

contingent of Arabs. Daily complaints were brought to the Emperor of the outrages committed by the Barbary pirates on his subjects, both in Spain and Italy, and the glory to be obtained by ridding the world of this odious species of oppression induced him to turn a willing ear to the representations of the dethroned prince, and to conclude a treaty with him for the invasion of Tunis. He drew contingents for this purpose from every part of the empire: a Flemish fleet brought a body of German infantry; the galleys of Naples and Sicily brought well-trained bands of Italians; the Pope rendered all the assistance in his power; the Knights of Malta, sworn enemies of the infidel, equipped a small but efficient squadron; the Emperor himself embarked at Barcelona with the flower of the Spanish nobility, and a considerable flotilla from Portugal under the command of Don Luis, the Empress's brother; Andrea Doria conducted his own galleys, the best appointed in Europe, and commanded by the most skilful officers. Doria was appointed high-admiral of the fleet; and the command of the land forces, under the Emperor, was given to the Marquis de Guasto.

On the 16th of July 1535 the fleet, consisting of nearly 500 vessels, and 30,000 regular troops, set sail from Cagliari, and after a prosperous voyage arrived at the site of Carthage, where a landing was effected without difficulty.

In the meantime Kheir-ed-din had not been idle: he called in his corsairs from their different stations; he drew from Algiers what forces could be spared, and enlisted the assistance of the African princes by representing Mulai Hassan not only as a vassal of a Christian prince, but himself an apostate from El-Islam. Twenty thousand Moorish horse were soon collected at Tunis; the Goletta was strongly fortified, and, as the Emperor had command of the sea, the Turkish galleys were sheltered in the canal which connects the lake of Tunis with the sea, which canal was widened for the purpose, and a constant service of boats was established to supply the garrison of the Goletta with supplies.

Notwithstanding an obstinate resistance, the Goletta was taken by assault on the 25th July; the garrison retired to Tunis, and the Emperor became master of Kheir-ed-din's fleet, arsenal, and 300 brass cannon, which were planted on the ramparts. The Emperor immediately marched on Tunis, completely overthrowing Kheir-ed-din, who advanced with a large force to oppose him. Ten thousand Christian slaves confined in the citadel effected their liberation and sided with the invaders, and Charles became master of Tunis. For three days the town was given over to pillage, and it is said that 30,000 of the inhabitants perished, and 10,000 more were carried off as slaves. Mulai Hassan took possession of a throne surrounded by carnage, abhorred by his subjects, and pitied even by those who had been the cause of those calamities.

He was obliged to sign a treaty, dated 5th August 1535, acknowledging that he held his kingdom in fee of the Crown of Spain, agreeing to pay 12,000 crowns for the subsistence of the garrison at the Goletta, and to send every year to the Emperor twelve horses, and as many falcons, as a token of vassalage. He also agreed to free all Christian slaves in his dominions, allow

perfect liberty of religion, the exclusive right of fishing for coral to the Spaniards, and undertook that no corsair should be admitted into any of his ports.

The Emperor left a garrison of 200 men in his citadel of Tunis, and retired to the Goletta, and thence to his former camp at Carthage; and having left orders for the construction of a new fort at the Goletta, he set sail for Europe. On his way he took possession of the ports of Bizerta and Bône, in which latter town he left a garrison of 1000 men.¹

Kheir-ed-din effected his escape (1536), but was immediately recalled to Constantinople, where he died in 1546.

Six very remarkable contemporary paintings illustrative of this expedition are extant, and were exhibited by Her Majesty the Queen to the Society of Antiquaries at London on the 8th May 1862. They represent:—

1. Landing of the expedition near Carthage.
2. Attack on the Goletta fort, and skirmish with the Turks.
3. Capture of the Goletta fort.
4. Advance on Tunis and defeat of the Turks.
5. Capture and sack of Tunis.
6. Convention with the Turks and departure of the army.

The paintings are attributed to an artist named Jan Cornelis Vermeyen, who is represented in one of the paintings as making his drawings. These interesting works of art were discovered in the Castle of Greinberg on the Danube and taken thence to Coburg. Through the influence of the late Prince Consort they were cleaned and repaired by M. Eichener of Augsburg, and subsequently brought to England for a time, when they were returned to Coburg. One of the pictures is of peculiar interest, as it gives an undoubted representation of the St. Ann, the curious *Carrack* of the Knights of St. John.

1537. Several of the cities of Tunis, amongst others Susa and Kerouan, revolted against Mulaï Hassan, who was forced once more to apply to Charles V.; by his command the Viceroy of Sicily sent an expedition against Susa in 1537, which, however, proved unsuccessful.

Two years later (1539) Andrea Doria reduced the principal cities on the coast—Kelibia, Susa, Monastir, and Sfax—to the authority of Mulaï Hassan, and Monastir received a garrison of Spanish soldiers.

Mulaï Hassan resolved to crush the insurrection by the reduction of Kerouan, against which he marched with a considerable force of native troops and the Christian garrison left behind by Charles V., but the former nearly all passed over to the enemy, and he was glad to get back to Tunis accompanied only by his Spanish allies. No sooner was the Spanish garrison withdrawn from Monastir (1540) when that town, as well as Susa, Sfax, and Kelibia, again revolted, and placed themselves under the protection of the celebrated corsair Draguth, an officer trained under Kheir-ed-din, and scarcely inferior to his master in bravery, talent, and good fortune. After a year, however, Doria again appeared on the coast and drove off the Turks.

1542. The precarious terms on which he held his power induced Mulaï Hassan to proceed in person to Europe, to solicit once more the help of the Christians. During his absence his son Mulaï Hamed usurped the kingdom, and on his father's return with a small body of followers, the son overcame

¹ Consult Robertson's *History of the Reign of Charles V.*

the father in battle, and, having put out his eyes, permitted him again to return to Europe, where he shortly afterwards died.

Algiers still continued in the state of independence in which it had been left by Kheir-ed-din, who was succeeded in the government by Mohammed Hassan, as Pasha, in 1536. He was a renegade eunuch, who had passed through every stage in the corsair's service, and had acquired such experience in war that he was well fitted for any station which required a man of tried and daring courage. He carried on his piratical depredations against the Christian states with even more audacity and success than his master. Repeated and clamorous complaints reached the Emperor that the commerce of the Mediterranean was greatly interrupted by the corsairs of Algiers, which, since the capture of Tunis, had become the common receptacle of freebooters. Moved partly by these considerations, and partly with the hope of adding further glory to his last expedition to Africa, Charles issued orders (1541) to prepare a fleet and an army for the invasion of Algiers.

He was deaf to the advice of his faithful admiral, Andrea Doria, that he should not expose his armament to destruction by approaching the dangerous shores of Algiers at an advanced period of the year. His resolution was as inflexible as his courage was undaunted: and even a prince less adventurous might have been excused for his confidence in so splendid an array.

It consisted of 20,000 foot and 2000 horse, Spaniards, Italians, and Germans, mostly veterans, together with 3000 volunteers, the flower of the Spanish and Italian nobility, and 1000 men sent from Malta, led by 100 of the Knights of St. John.

He sailed from Porto Venere, in the Genoese territories, and, having touched at Majorca, arrived before Algiers on the 20th October 1541. At first the roll of the sea and the vehemence of the wind would not permit the troops to disembark, but at last the Emperor seized a favourable opportunity and landed them without opposition between Algiers and the mouth of the Harach, on the spot now occupied by the Jardin d'Essai.

To oppose this mighty army Hassan had only 800 Turks and 5000 Moors, partly natives of Africa and partly refugees from Spain. He returned, however, a fierce and haughty answer when summoned to surrender.

But what neither his desperate courage nor skill in war could have done, the elements effected for him. On the nights of the 24th and 25th violent rain began to fall, which rendered the firearms of the invaders useless; the Turks, taking advantage of the storm, pursued the Christians with such impetuosity that they were compelled to retreat. One hundred and forty of the vessels were wrecked by the same tempest. The survivors were embarked on board the remainder at Cape Matifou on the 1st, 2nd, and 3rd of November, notwithstanding the earnest advice of Cortez, the conqueror of Mexico, who felt confident that a second attempt would be more successful. The Emperor was the last to embark. He arrived at Bougie on the 4th, remained there till the 17th, and arrived in Spain on the 1st of December, having lost a third of his army and more than a third of his fleet.

In 1542 Hassan, Pasha of Algiers, attacked and massacred the tribe of the

Zouaoua, who had furnished 2000 men for the army of Charles V. His successor was Hassan, son of Kheir-ed-din, who continued in power until 1552, when Salah Rais, an Arab of Alexandria, was made Pasha. He retook Bougie from the Spaniards (whose governor, Peralta, was beheaded at Valladolid), united the towns of Tlemçen and Mostaganem to the regency of Algiers, and died of the plague at Matifou in 1556.

The next Pasha, Mohammed Kordougli, was assassinated in the Koubba of Sidi Abd-el-Kader, in the same year, by Youssef, who succeeded him, but only reigned six days, when he died of the plague.

After several short and unimportant reigns, Mohammed, son of Salah Rais, was created Pasha in 1566. He made some additions to the town, and built several new forts, and was succeeded in 1568 by Ali el-Euldj el-Fortas, a celebrated pirate, whose reign was passed in a succession of wars against the neighbouring nations. After him came Arab-Ahmed, 1572 to 1574; and Ramdan, a renegade Sardinian, 1574 to 1576; both of whom added to the fortifications of the town. At this time there were not less than 25,000 Christian slaves in bondage in Algiers.

In the next forty years as many as eighteen different Pashas reigned; their governments being distinguished only by wars, assassinations, extortion, and tyranny.

The history of the country now becomes very obscure. Internally the Turks extended their conquests over the whole of the Barbary States, even as far south as the desert. They divided Algeria into the three "Beyliks" of Oran, Constantine, and Titeri, the regency still having its capital at Algiers. With regard to the outer world, the history of the State is but that of the large towns, which sent out their pirate vessels even as far as the North Sea, and became so powerful in the Mediterranean that none of the European States escaped the disgrace of paying at times a regular tribute to secure safety to their mariners.

Amongst other captives, in the year 1555, was Cervantes, who remained in captivity five years and a half. He was taken prisoner on the voyage from Naples to Spain by a squadron of Algerine galleys, commanded by Amant Mame, and fell to the lot of Dali Mame, a Greek renegade, captain of one of the galleys. His freedom was purchased by the *Padres Redemptores* on the 19th September 1580. He has described some of the miseries to which he was subject in the story of "The Captive" in *Don Quixote*. A grotto is pointed out in the "Propriété Sabatery," near the Jardin d'Essai, where Cervantes and his companions resided after their attempted flight from Algiers and before being actually freed. Many of the Christians, hopeless of regaining their liberty, renounced their religion, and some rose to high places in the State, several even becoming Deys. It is said that in 1640 there were 3000 renegade corsairs in the Algerine fleet; a large proportion, no doubt, tempted to join by the chance of enriching themselves which such a trade offered.

An **English Consulate** was established at Algiers towards the end of the 16th century. John Tipton, who held the office in 1580, was perhaps the first consul of British nationality ever regularly appointed with a commis-

sion and an exequatur, and there has been an uninterrupted succession ever since.¹

Very early in the 17th century the Algerines began to substitute square-rigged vessels for the galleots which they had been in the habit of using. Sir Francis Cottington, writing from Madrid to the Duke of Buckingham in 1616, says: "The strength and boldness of the Barbary pirates is now grown to that height, both in the ocean and Mediterranean seas, as I have never known anything to have wrought a greater sadness and distraction than the daily advice thereof. Their whole fleet consists of 40 sail of tall ships of between two and four hundred tons apiece."

About this time a prize was made on the coast of France which had the effect subsequently of bringing hope, comfort, and deliverance to many a weary Christian slave. A young man of the name of **Vincent de Paul** embarked on board a vessel at Marseilles bound for Narbonne. It was taken by three Barbary pirates in the Gulf of Lyons, and all on board carried to Tunis. Vincent de Paul was at first sold to a sailor, who soon parted with him. He was subsequently purchased by an Arab doctor, with whom he remained from September 1605 till August 1606, when his master died, leaving him to a nephew, who soon after sold him to an Italian renegade.

St. Vincent was the cause of this man's return to Christianity, and they both escaped in a boat to France in July 1607. In 1625 St. Vincent laid the first foundation of his mission, which continued without interruption in Algeria and Tunis till the former country became a French possession. Indeed, it exists there at the present time, engaged in other works of piety and charity.

1616. **Mustapha Pasha** (Algiers). At this time Louis XIII. complained to the Porte at Constantinople, in consequence of the behaviour of the Pashas, and sent to the galleys some Algerine captives who had escaped from Spain into France. In return the Pasha imprisoned M. de Vias, the French consul at Algiers, who had to purchase his liberty by payment of large sums of money, and in 1618 was succeeded by M. Chaix, previously vice-consul. In March 1619 a treaty of peace was signed between Louis XIII. and the Pasha Hussein.

1621. **Kader Pasha** (Algiers): Hostilities again commenced with France and some Algerine envoys were put to death at Marseilles, in retaliation for which M. Chaix was killed.

In 1620 **Sir Robert Mansel**, vice-admiral of England, was sent to make a demonstration against Algiers. The royal navy was not yet, however, sufficiently large to rely on its own resources, and in this, the only warlike operation undertaken by it during the reign of James I., the greater number of vessels employed were hired from private merchants. It consisted of eighteen ships, six belonging to the king and twelve hired ones, and so greatly had the size of British ships increased during late years, that the smallest of the royal vessels was 400 tons burden, and carried 36 guns. The expedition itself was productive neither of benefit nor glory. It was

¹ For an account of British relations with Algiers from this time till the French conquest, see the author's *Scourge of Christendom*. Smith, Elder and Co. 1884.

thus described by Mr. Secretary Burchell : " Such was the ascendant Count Gondomar, the King of Spain's ambassador, had at the court of King James I., that at his solicitations a squadron of men-of-war was sent to the Mediterranean, commanded by Sir Robert Mansel, to bring the Algerines to reason, by whom the Spaniards were daily most insufferably molested. That commander appeared before Algiers ; but he had not much reason to be satisfied at the success he there met with, and in return for the civility of his visit, his back was scarce turned but those corsairs picked up near forty good sail belonging to the subjects of his master, and infested the Spanish coasts with greater fury than ever."

The narrator of this expedition, who was on board one of the vessels, mentions that while they were still in the harbour conducting their fruitless negotiations, two British vessels were brought in as prizes by the "Turkes Pyrates," and there is no mention made of any demand for their restitution. The admiral had sent the King's letters to the Dey in charge of Captain John Roper, who was detained until a consul should be appointed. The nomination of this consular officer is more curious than flattering to our national dignity. The historian of the expedition says : "The 6th (December 1620) after long debating, finding the Turkes perfidious and fickle, as well as detaining our messenger who delivered His Maiestie's letters, notwithstanding we had sufficient hostages for him, as in breaking all other promises, in the end it was agreed thus : upon leaving a consull with them they would let our messenger come aboard againe. Whersupon the admirall sent a common man¹ well clothed, by the name of a consull, whom they received with good respect, and sending our messenger aboard, received their oune pledges and delivered us some 40 poor captives, which they pretended was all they had in the towne. This was all we could draw from them."

1628. The Dutch Admiral Lambert arrived in 1624 with six vessels to demand the restitution of certain captured slaves and ships, which was at first refused by the Divan ; but after Lambert had hanged at the yard-arms of his vessels the pirates in his power, his demands were granted. In 1628 Sanson Napollon concluded a peace with the Pasha Hussein-Khoja on behalf of the French, in which slaves were exchanged ; this peace cost them £270,000. In the same year the Koulouglis revolted, and were nearly all massacred.

The audacity of the Algerine pirates at this time was unparalleled, their prizes amounting to, it was said, about 20,000,000 francs. The Christian powers of Europe having constantly endeavoured to exterminate them without success, had now nearly all adopted the expedient of paying tribute to the Pasha to escape their depredations, which they carried as far as the North Sea.

Even the shores of England were not respected. An incident which occurred a few years earlier deserves to be recorded, in the words of the principal actor in it, the **Rev. Devereux Spratt** :²—

"October 23rd, 1640.—The horrid rebellion of Ireland brake forth, and

¹ Mr. Richard Ford.

² The MS. of this diary was in the possession of his descendant, the late Admiral Spratt, R.N.

in it God's severe judgements upon the English Protestants, there being not less than 150,000 murdered as by public records appears. . . . I returned to Ballybegg, where I remained in the discharge of my calling until the English army came to carry us off. . . . Then at Corke I petitioned the Lord Inchaquin, who gave me a pass for England; and coming to Youghole in a boate I embarked in one John Filmer's vessell, which set sayle with about six score passengers; but before wee were out of sight of land wee were all taken by an Algire piratt, who putt the men in chaines and storkes. This thing was so greivous that I began to question Providence, and accused Him of injustice in His dealings with me, untill ye Lord made it appear otherwise by ensueing mercy. Upon my arrivall in Algires I found pious Christians, which changed my former thoughts of God, which was that He dealt more hard with me than with other of His servants. God was pleased to guide for me, and those relations of mine taken with me, in a providential ordering of civil patrons for us, who gave me more liberty than ordinary, especially to me, who preached the Gospel to my poor countrymen, amongst whom it pleased God to make me an instrument of much good. I had not stayed there long, but I was like to be freed by one Captain Wilde, a pious Christian; but on a sudden I was sould and delivered to a Musselman dwelling with his family in ye towne, upon which change and sudden dissappointment I was very sad. My patron asked me the reason, and withall uttered these comfortable words, 'God is great,' which took such impression as strengthened my faith in God, considering thus with myself, shall this Turkish Mahumetin teach me, who ame a Christian, my duty of faith and dependence upon God?

"After this God stirred up ye heart of Captaine Wilde to be an active instrument for me at Leagourno in Italy, amongst the merchants there, to contribute liberally towards my ransome, especially a Mr. John Collier. After the captaine returned to Algires he paid my ransome, which amounted to 200 cobs. Upon this a petition was presented by the English captives for my staying amongst them; yt he showed me, and asked what I would do in ye case. I told him he was an instrument under God of my liberty, and I would be at his disposing. He answered, Noe. I was a free man, and should be at my own disposing. 'Then,' I replied, 'I will stay,' considering that I might be more servisable to my country by my continuing in enduring afflictions with the people of God than to enjoy liberty at home."

Shortly before the outbreak of the Civil War an Act of Parliament was passed by both Houses "whereby they did manifest unto the world their resolution of undertaking that Christian work of the **Redemption of the Captives** from the cruel thraldome that they lay under." For some time, however, all action in this respect was necessarily intermitted. In the year 1645 the Parliament sent out "a ship of strength called the *Honour*, laden with a Gargasoon of money and goods to a great value," in charge of their special agent, Edmond Casson, who was authorised to treat for the liberation of the English captives at Algiers. Unfortunately this vessel was destroyed by fire in the harbour of Gibraltar, but in the following year (1646) another

similar vessel, called the *Charles*, was despatched. The parliamentary report of the mission thus relates the result:—

“In prosecution of which orders the said agent, ship, and goods proceeded on the voyage, and God hath so blessed the work that they arrived in safety at Alger, where after a long and difficult treaty, the register of the captives was taken, wherein are enrolled the names of all that are upon that place, and the price for their ransom agreed on, as they first cost in the market. That Gargasoon of money and goods hath by the agent been so well managed, that 244 persons, men, women, and children are redeemed and sent home in the said ship, the *Charles*. The agent is constrained to stay there until such time as the remainder are likewise redeemed, in preparation to the despatch whereof two ships are now preparing to be sent thither with a greater Gargasoon than before.” Casson died at Algiers in 1654.

In 1637 some French vessels took possession of two Algerine pirate ships, on board of one of which was the new Pasha, Ali, coming from Constanti-nople. In return, Youssef seized M. Pion, the French consul, and an agent named Mussey, both of whom narrowly escaped being burnt alive. At this time Algiers possessed 300 pirate vessels; and in the same reign the town was nearly destroyed by an earthquake.

In 1655 took place **Blake's celebrated action at Tunis**, one of the grandest feats in English naval history. There were long accounts to settle with that regency for its piratical conduct towards British vessels, and there was a strong suspicion that many unhappy captives languished there in slavery. He first made his appearance at the Goletta, but, failing to obtain any satisfaction for his just demands, he broke off negotiations, proceeded to Cagliari for provisions, and on the 3rd of April again appeared off Porto Farina, the winter harbour and principal arsenal of the Bey of Tunis, where his fleet was anchored inshore under the guns of the batteries; these were strengthened for the occasion, and further protected by a camp of several thousand horse and foot.

At daybreak on the 4th of April, Blake, with his whole squadron, consisting of the *St. George*, his own flag-ship, the *St. Andrew*, carrying the flag of Vice-Admiral Badly, the *Plymouth*, *Newcastle*, *Taunton*, *Foresight*, *Amity*, *Mermaid*, and *Mertin*, rode into the bay, and, divine service having been performed, coolly proceeded to anchor as close to the great batteries on shore as they could float. In a short time the whole artillery of Porto Farina, not less than 120 guns of large calibre, opened fire upon the fleet, which fiercely replied against its solid masonry. The conflict was still undecided when Blake sent his boats under cover of the smoke to burn the corsair vessels. The whole of the nine large ships of war were speedily in flames. In four hours from the first broadside the work was done, the pirate vessels were utterly destroyed, the batteries on shore were silenced, and the walls of Porto Farina were so much injured that the works could easily have been carried by assault, had Blake deemed it advisable to do so. But his aims were accomplished, and the lesson then read to the Tunisians made his subsequent negotiations with other Barbary States a matter of little difficulty. When the English squadron anchored off Algiers to demand restitution of property

and the liberation of English slaves it met with little opposition, and a bargain was made for the ransom of all the captives at a fixed price.

1661. Disputes between the Governments of Algiers and Great Britain became very frequent about this time, as the fear of our power had been so much lessened by Blake's death that the corsairs had again begun to commit depredation on our shipping. Mr. Pepys tells us how he went to the Fleecie tavern to drink, and remained till four o'clock, telling stories of Algiers and the manner of life of slaves there, and how Captain Mootham and Mr. Danes (father of the Archbishop of York), who had been both slaves there, did make him fully acquainted with their condition, how they did eat nothing but bread and water, and how they were beat upon the soles of their feet and their bellies at the liberty of their patron.

In that year the **Earl of Sandwich** was sent by Charles II. to bring over the Queen from Portugal, and at the same time to settle the matters in dispute at Algiers. In the latter mission he was quite unsuccessful. Pepys observes, "The business of Algiers hath of late troubled me, because My Lord hath not done what he went for, though he did as much as any man in the world could have done." And later, that early in 1662 letters came from "My Lord" that "by a great storm and tempest the whole of Algiers is broken down and many of their ships sunk into the Mole, so that God Almighty hath ended that unlucky business for us, which is very good news."

This no doubt disposed the Pasha to conclude a peace with England, which was done by Admiral **Sir John Lawson** on the 23rd April 1662.

In 1663 Lawson again proclaimed war on Algiers, in consequence of some English vessels having been captured, and the refusal of the Dey to make restitution for the goods which had been taken out of them, together with the imprisonment of the consul. Peace was concluded by Admiral **Sir Thomas Allen**, on 30th August 1664, on the basis of the last one. A treaty of peace between France and Algiers was signed in 1666, by which all Algerine privateers were furnished with a free pass by the French consul; but it was broken in 1667 by Ismail sending some ships against the French to the siege of Candia. He was finally beaten by the Marquis de Martel, and peace re-established.

In 1669 an officer named Khelil proposed to the Janissaries or Turkish militia that the power should no longer be solely in the hands of the Pashas, who were becoming unbearable through their tyranny, but that their interests should be represented by an Agha, elected by themselves.

The Pasha was retained out of respect to the Sultan, but he was not permitted to interfere in State affairs, though allowed an appanage suitable to his rank. This plan was adopted, and the reigning Pasha, Ibrahim, thrown into prison, and Ismail appointed in his stead. The originator of the plan, Khelil, was made Agha, and shortly after assassinated in 1670.

In 1669 war was again declared between England and Algiers, and Sir Thomas Allen was once more charged with its conduct. This expedition was no more successful than the previous one, if we except the brilliant episode of **Sir Edward Spragg's** action at Bougie, where the principal fleet of the pirates

was assembled, protected by a strong boom thrown across the entrance of the harbour. Sir Edward broke the boom, silenced the batteries, and captured or burnt the whole of their shipping. The Algerians rose in revolt against their Government on receiving news of this disaster, and put the reigning Dey, Ali Agha, to death, making at the same time ample submission to the English admiral.

In 1675 the Dutch offered large sums for the purchase of peace, but their terms were not accepted by the Divan at Algiers. Even as regards England they seemed not to have had a sufficiently severe lesson, for in 1677 it was found necessary to send **Admiral Herbert** against them with another squadron, but the mere sight of his force recalled to their minds so lively a recollection of the chastisement they had received from Sir Edward Spragg that they at once submitted, and, though they plundered every one else, it was some time before they ventured to insult the British flag. But the mere fact of keeping Englishmen in bondage did not seem to have been considered "an insult to the British flag" in those days.

The **piratical search for slaves** was in fact an organised system. The Turks considered it lawful to keep all Christian prisoners in bondage, and entirely at the mercy of their respective masters. The answer of the Dey to the remonstrances of an English consul was, "Know you not that my people are a company of rogues, and I am their captain?" Not only were all prisoners of war so treated, but it was the constant habit of the Dey, on any European State attempting reprisals, to send to the galleys the consul of that country, and all merchants and crews of vessels who were bold enough to have visited his ports for the purpose of commerce. On many occasions hundreds of these peaceful traders were killed, and the consuls also treated with great barbarity, being burnt alive, or blown from the mouths of cannon; while, in one instance, on the approach of a French fleet, their representative was thrown down them from a mortar. The number of whites kept in slavery is astonishing. In 1646 it was reckoned that there were not less than 20,000; in 1768, 1500 Christians were redeemed by Spain alone; and when Lord Exmouth finally destroyed the pirate navy in 1816, he obtained the liberty of 3000. These are some of the most striking instances; but hundreds of captives were annually ransomed by their respective nations, or by societies formed for the purpose. Many priests nobly devoted themselves to ministering to the slaves, even voluntarily going to the galleys for the sake of being with them. Several of these, who were killed among the other victims of the Turks, have been canonised.

War again broke out with Algiers, and lasted for five years. It is stated on excellent authority that between the years 1674 and 1681 five or six thousand English slaves were brought into Algiers, and about 350 vessels captured, and at the peace of 10th April 1682 the Dey refused to surrender a single English slave, leaving the general to bargain with their several masters as best he could for their ransom.

The treaty then signed between Charles II. and the Government of Algiers contained a clause to the following effect: "The King of Great Britain shall not be obliged by virtue of this treaty to redeem any of his subjects now in

slavery, but it shall depend absolutely upon His Majesty or the friends or relations of the said persons in slavery to redeem such as shall be thought fit, agreeing to as reasonable a price as may be with their patrons or masters for their redemption, without obliging the said patrons against their will to set any at liberty." This treaty, which may be seen in vol. i. of Hertslet's *Compilation*, page 58, is probably the most degrading one ever concluded between Great Britain and a foreign power; nevertheless, this provision was renewed by James II. on 5th April 1686, and by George II. on 18th March 1729. The condition of the slaves was most pitiable. Such as belonged to the Dey were imprisoned in the *Bagnio*. They had a ration of black bread and a little soup once a day; they were compelled to labour incessantly, some at the quarries outside the town; others were harnessed to stone carts like mules; many had to labour at the ovens where bread was made for the Janissaries, and their lot was even more miserable than the others; the least wretched were the skilled artisans, but these found it almost impossible to obtain their freedom, so useful were they to the State. Such as were owned by private individuals were even more unfortunate than the others, being treated worse than beasts of burden, and liable to every species of cruelty and torture that their pitiless masters could devise. The only consolation left to them was the ministrations of the Catholic missionaries, who spent their time, and often sacrificed life itself, in solacing their misfortunes.

In August and September 1682, and again in 1683, the French **Admiral Duquesne** appeared before Algiers with a strong fleet, and commenced to bombard the town; it was the first occasion of shells being used for such a purpose, and they not only committed great ravages in the town, but so terrified the Dey that he consented to deliver up 546 French slaves. This enraged the Turks beyond endurance. The Dey, Baba Hassan, was murdered, and Mezzo-Morto elected in his stead. His first act was to threaten Duquesne to blow away every Frenchman from guns if the attack was renewed—a threat which he carried into execution by thus disposing of M. Le Vacher, the French consul and Vicar-Apostolic, together with twenty other Frenchmen.¹ In 1684 a humiliating peace was concluded, nominally for 100 years.

In 1688, in consequence of some raids made upon French, English, and Dutch ships, and the imprisonment of the French consul, M. Piolle, the town was bombarded by the **Duke d'Estrées**. Mezzo-Morto was wounded, and M. Piolle and forty Frenchmen were blown from the mouths of cannon. From this period to the end of the century the country was in a state of anarchy, many Deys being appointed, and immediately afterwards assassinated. The city was constantly ravaged by the plague, it being said that in 1698, 24,000, and in 1702, 45,000 persons died of this malady.

The successive attempts of various European nations to suppress this nest of ruffians having thus proved completely futile, they were all in turn obliged to buy peace, and even to submit to the additional disgrace of paying part of their tribute in cannon, bombs, and other munitions of war. The conditions

¹ The immense cannon from which these unfortunates and many others were blown away was called by the Turks *Baba Merzouk* (Father Fortunate), and by the French *La Consulaire*. It is now preserved as a trophy on the Place d'Armes at Brest.

imposed on the Danes may be cited as an instance in proof. Peace was accorded to them only on condition of immediately delivering to the Dey twenty 24-pounder guns, twenty 12-pounders, four iron mortars, 6600 shells, 20,000 cannon balls, 20,000 lbs. of powder, 50 masts, 100 yards, 20,000 lbs. of tar, 10,000 lbs. of resin, 2000 planks, 40 cables, and further paying him annually, 10,000 lbs. of powder, 4000 balls, 25 masts, 50 yards, 12 cables and 24 hawsers.

One can understand how, receiving such presents every year, frequently augmented at the caprice of the Dey, the State of Algiers was able to strengthen itself, so as to become the scourge of Europe.

In 1710 a new revolution gave to the Algerian Government the constitution which it continued to hold until the French conquest. The Janissaries obtained the Sultan's consent that the Dey elected by themselves should be named Pasha, and that the Sublime Porte should have no other representative in Algiers. From this moment it became in reality an independent State, and its connection with Constantinople was restricted to the despatch of a present, in exchange for the Caftan of Investiture on the accession of a new Dey. In the same year the Dey of Oran made an expedition against Algiers, but was defeated on the banks of the Harrach, and beheaded.

1716. The town partially destroyed by an earthquake.

1719. Mohammed, Pasha Dey, renewed the treaty of peace with France.

The year 1726 was celebrated for the unusual cold, Algiers being in that winter covered with snow.

1732 to 1748. Ibrahim bin Ramdan, Pasha, during which period frequent struggles with Tunis took place.

On the 1st of February 1748 Ibrahim bin Ramdan, Pasha of Algiers, died, not without suspicion of poison.

1748 to 1754. To him succeeded Mohammed Khoja, surnamed the *one-eyed*, who had the reputation of being just, humane, and superior to all the other aspirants to the throne.

In 1752 and 1753 there was a serious outbreak of plague at Algiers. In April of the latter year 400 died in the city, in June 1700, and as many in July, but it was much more at many other cities of the regency, especially Djidjelly, La Calle, and Constantine. In 1754 and 1755 there were only a few isolated cases at Algiers, but in 1756 this scourge seemed inclined to make up for its inaction during the two previous years, and by the end of August 10,000 had died in the city alone.

1754 to 1766. On the 11th of December 1754 the Dey and his Khaznadar were both assassinated, and Baba Ali was elected in the place of the former. He was a man entirely wanting in good sense and capacity. He at once recommenced the war with the Dutch, who were fain to conclude an onerous and humiliating peace. He rendered himself popular by encouraging piracy and other crimes. He took Tunis, which was given up to pillage. The French consul was sent to the Bagnio, as many of his predecessors had been, and only released on payment of a large sum of money. One of his successors was similarly treated. The Bey required some of the European States to

renew their consuls every three years, on account of the presents which he was accustomed to exact on such occasions ; and others, like Venice, he actually compelled to pay him an annual tribute.

From 1762 to 1765 **James Bruce** of Kinnaird, the well-known African traveller, held the office of British Consul-General at Algiers. After resigning office he made extensive explorations in Algeria, Tunis, Tripoli, and the Pentapolis, where he made accurate drawings of all the Roman remains of any consequence in those countries. A selection of these was published, after the lapse of more than a century.¹

1766 to 1791. **Baba Ali Dey** died on the 2nd February 1766, and was quietly succeeded by **Mohammed bin Osman**, who had occupied the place of treasurer to his predecessor. He governed his people sagely and well during twenty-five years, and did what a Dey of Algiers could to restrain the piratical tendencies of his subjects within due limits.

In no former reign had there been so many conspiracies against the Dey's life, but none of them were successful. He was exceedingly exacting in his negotiations with European States, and managed under one pretext or another to lay them all under contribution to him.

In 1775 took place the unfortunate Spanish expedition against Algiers, commanded by the **Count O'Reilly**. It consisted of fifty-one vessels and about 24,000 troops. They left Carthage on the 23rd June, and arrived before Algiers on the 31st June and 1st August. They landed to the east of the river Harrach, and the first division at once commenced its march towards the town. They were so harassed, however, by the enemy, who had taken up advantageous positions all along their route, that they became thoroughly discouraged, and when subsequently they were charged by a troop of camels, they retreated in the utmost confusion to their vessels. The loss acknowledged by the Spaniards was 218 officers and 2589 men killed and wounded, besides which the army abandoned 18 pieces of artillery and a great number of arms and munitions of war.

Another naval expedition was sent against Algiers in 1783, which bombarded the town, killing about 300 persons and destroying about as many houses. A third and even more futile attempt was made in the following year. Subsequently, in 1785, they concluded a peace with the Dey, for which they were content to pay a million piastres and a vast amount of military stores.

In April 1786 the **plague** again broke out ; it lasted eighteen months, and carried off more than a third of the population. It was calculated that during the first fifteen months 35,600 Mohammedans, 2300 Jews, and 620 Christian slaves, in all 38,520, perished.

In 1789 the French entered into a new treaty with the Dey at the price of most humiliating concessions, the negotiators consoling themselves with the fact that Louis XIV., after three expeditions against Algiers, had been compelled to purchase an equally inglorious peace.

1791 to 1799. In July 1791 **Mohammed bin Osman** died, and **Baba Hassan** was proclaimed Dey. His first act was to demand a frigate from the French to convey his ambassador to Constantinople, and to inform the consuls that

¹ *Travels in the Footsteps of Bruce in Algeria and Tunis.* By the Author.

in future the annual presents or tribute should be doubled. It never seemed to occur to any European power to dispute the orders of this despot, although compliance with them only made him the more exacting. Whenever he was in want of money he declared war on some European power, and forced it to purchase peace at an extravagant price. Venice, Spain, Holland, Portugal, Denmark, and Naples were thus treated, and even America followed their example. Small wonder then that at this time the Dey's treasury was reported to contain 4 millions sterling!

Nevertheless, the power of the Algerine State was by no means formidable. Shaw states that in 1732 they had only half a dozen ships of from thirty-six to fifty guns, and not half that number of brave and experienced captains. The whole land force in Turks and Koulouglis was not more than 6500, of whom one-third were old and worn-out, and though the seaward defences were pretty strong and carefully looked after, those on the landward side were quite insignificant. Even sixty years later, though they had accumulated an immense supply of naval stores of all kinds, there is no reason to suppose that they were substantially stronger, or that any of the principal nations of Europe would have had the least difficulty in extirpating them. The fact was that the nations of Europe were too much occupied in fighting amongst themselves to be able to pay much attention to Algiers, and each was very well content that the Algerines should prey on the commerce of its neighbours if only its own remained secure.

1799 to 1805. On the 15th May 1799 Baba Hassan died, and was succeeded by his nephew Mustapha, an ignorant and avaricious person, who commenced his reign by the pillage of his predecessor's family, the consuls as usual being laid under contribution. In 1800, in consequence of the French occupation of Egypt, the Dey arrested all the consular establishment of that nation, the priests and many others, who were at once put in chains, and kept in the Bagnio for thirty-three days. On the 30th September 1800 the great Napoleon agreed to a peace at the price of oblivion for the past and a payment of 300,000 piastres to the Dey; but this not being approved of by the Sultan, the French consul and all his countrymen were ordered to quit the regency, and left on the 30th January 1801. They were not allowed to return till after the conclusion of the preliminaries of peace between England and Turkey on the one hand, and France on the other, towards the end of the year.

The **United States** had at this time (1800) a considerable trade with the Mediterranean, and the Algerines were not backward in falling upon the unsuspecting and unarmed Americans, capturing their ships and casting the crews into bondage.

Immediately after the peace of 1783, when the United States became an independent nation, Algiers declared war upon them. In 1785 two American vessels were captured in the Atlantic Ocean. In 1793 eleven more prizes were made, and then the number of American citizens in slavery at Algiers exceeded a hundred. Colonel Humphreys, American minister at Lisbon, was charged by the President to negotiate with the Barbary States, and he despatched Mr. Joseph Donaldson for that purpose to Algiers. He then nego-

tiated a treaty of peace, by which the Americans bound themselves to pay to the Dey the sum of 721,000 dollars, partly as ransom for American captives, and partly as gratification, presents, etc., to the Government of the regency. It was further agreed that the American Government should pay an annual tribute of 22,000 dollars in munitions of war and marine stores, which sum, in consequence of the arbitrary value fixed on the various articles, was almost doubled in reality.

In the month of October 1800 the United States 32-gun frigate *George Washington*, commanded by Captain Bainbridge, was lying at anchor in the roads of Algiers. The Dey considered this a fine opportunity to get the presents which he, as well as the heads of the other regencies, annually paid to the Sultan, conveyed to Constantinople. He made a requisition for the services of the frigate for this purpose, and the commandant, though most unwillingly, thought that he could not avoid performing the duty. This conduct deeply wounded the susceptibility of the Americans, but the President thought it more prudent to follow the example of older and richer States in Europe, and make the best terms he could with the Algerines.

The influence of France now began to wane in Algiers. The defeat of Trafalgar destroyed its marine and its commerce, and made England undisputed mistress of the seas. The French were expelled from La Calle, and the exclusive privilege of coral fishing conceded to the English for a period of ten years at a rent of 267,000 f. per annum.

1805 to 1807. On the 12th of September 1805 Mustapha was murdered by the Janissaries and replaced by Ahmed Khoja. The first thirty days of his reign were marked by the spoliation of the Jews, and the most frightful massacres; the usual presents from the consuls were exacted with the utmost rigour, and in one week he extorted from Spain 12,000 piastres, Holland 40,000, America 100,000, Austria 50,000, and England 10,000.

1808 to 1809. Ahmed Dey was killed on the 7th of November 1808 by the relations of those whom he had massacred on his accession, just as he was on the point of escaping to France with his ministers and treasures; his successor, Ali bin Mohammed, only lived a few months, being in his turn assassinated on the 7th of February 1809.

1809 to 1815. Haji Ali, his successor, commenced his reign with an act tantamount to a declaration of war with France. He demanded an exorbitant sum from the consul, and not only imprisoned him, but also M. de Berthemy, aide-de-camp to Napoleon, and M. Arago, the celebrated astronomer, then on a purely scientific mission to Algiers. They only purchased their release after three months' captivity by the payment of a large sum of money.

1812. In 1812 the Government of Algiers again declared war on the United States. It is believed that the Regency adopted this step on the advice of certain Jews, who, seeing the increasing importance of the American mercantile marine, thought that Algiers might as well obtain a share of this commercial prosperity by the simple expedient of plunder. The moment chosen for this step was the 17th July 1812, when the *Alleghany*, an American vessel, arrived at Algiers with the annual tribute. The Dey showed the greatest dissatisfaction at the articles of which it was composed. He ordered

the consul to pay the tribute in money for the future ; and, together with his family and all American citizens, to quit the regency by the 25th of the same month. The consul did all he could to persuade the Dey to reconsider this decision, but without effect ; he was actually compelled to leave. In the month of September following, an American vessel was captured, and the President endeavoured in vain to obtain the release of the captives by paying their ransom. The Dey refused to enter into any negotiation on the subject, declaring that he considered American slaves as beyond price.

The Congress of the United States could no longer tolerate such behaviour or support the idea of remaining tributary to Algiers. Accordingly, in May 1815, **Captains Bainbridge and Decatur** and **Mr. William Shaler** were chosen by the President to proceed to Algiers with a squadron, and on their arrival there they at once made a demand for a modification of all existing treaties. The Algerines were confounded at this step, and, as it happened that all their vessels were then out cruising, they accepted almost without discussion the conditions dictated to them, and the treaty was signed on the 30th of June. On the same day Mr. Shaler landed as Consul-General of the United States at Algiers.

Commodore Decatur then proceeded towards Tripoli and Tunis, and compelled the governments of those regencies to comply with his demands.

1815 to 1817. In the middle of March 1815 Haji Ali was murdered by his soldiery, and his successor Mohammed only survived him a fortnight, he having been arrested and strangled in prison. Omar bin Mohammed, Agha of Spahis, was the next Dey. He was born in Mytelene, and was forty-three years of age when he came to the throne. He is represented as having been singularly handsome in appearance, and of great natural intelligence, sober and continent in his life, and of a courage so renowned that it gained him the name of "the terrible."

In the beginning of 1816 **Lord Exmouth** was ordered to proceed to the various Barbary States to claim the release of all Ionian slaves who had then become British subjects, and to make peace for Sardinia. He was also permitted to make peace for any other States in the Mediterranean which should authorise him to do so. He had no difficulty in obtaining the liberation of the Ionians, and he also effected the freedom of the Neapolitans and Sardinians, the former paying a ransom of 500 and the latter 300 dollars a head.

The fleet then sailed for Tunis and Tripoli, where Lord Exmouth concluded treaties with the Beys, entirely abolishing the institution of Christian slavery.

He again visited Algiers and attempted to enforce a similar demand, but the Dey answered as a man confident in his strength to resist it. Lord Exmouth assured him that he formed a very inadequate idea of a British man-of-war, and declared that if hostilities should become necessary he would engage to destroy the place with five line-of-battle ships.

On his way back to the ship Lord Exmouth and suite were very roughly handled by the Algerines, but eventually the Dey consented to treat on the subject in England and at Constantinople. Lord Exmouth, having no authority to enforce his demands was fain to be content with this and returned

to England. But before he arrived, news came that while he was still at Algiers on the 23rd of May, the crews of the coral fishing-boats at Bône had gone on shore to attend mass, it being Ascension Day, when they were attacked by a large body of Turks and barbarously massacred.

The British Government, justly considering that these barbarians, whose existence was a reproach to the civilised world, had filled up the measure of their crimes by this outrage, determined to exact complete submission or inflict the most signal vengeance.

The ancient harbour of Algiers was then very much as it now appears in the plan, without of course the jetties, which have been added by the French. The entrance was not more than 120 yards wide. All around bristled with fortifications and artillery. The lighthouse battery had 50 guns in three tiers; at the extremity of the rock was a battery with 30 guns and 7 mortars in two tiers; the mole itself was filled with cannon in a double tier; the eastern batteries next the lighthouse had an inner fortification with a third tier of guns, making 66 guns in those batteries alone. The islet had in all 220 guns, besides 300 more in the various batteries along the coast-line opposite to it.

Nelson, in a conversation with Captain Brisbane, had named twenty-five line-of-battle ships as the force that would be required to attack them. Lord Exmouth was offered any force he required, but he determined to take no more than the number he had mentioned to the Dey, five ships of the line, to which, however, were added three heavy and two small frigates, four bomb vessels, and five gun-brigs.

On arrival at Gibraltar on the 5th of August he found a **Dutch squadron**, consisting of five frigates and a corvette, commanded by Admiral van Capellan, who, on learning the object of the expedition, solicited and obtained leave to co-operate.

On the 27th the fleet arrived opposite Algiers, and a flag of truce was sent on shore to communicate the ultimatum of the British Government, and demand the immediate liberation of the consul, who had been imprisoned in irons.

No answer was given, when the fleet bore up and each vessel proceeded to take up its appointed station. The flag-ship, the *Queen Charlotte*, anchored half a cable's length from the mole head, her port battery flanking the batteries from the mole head to the lighthouse. A gun was now fired from the upper tier of the eastern battery, a second and a third followed, the remainder being drowned by the thunder of the *Queen Charlotte's* broadside.

The enemy now opened fire from all their batteries, while the rest of the British squadron took up their position at the entrance to the mole. The Dutch squadron with admirable gallantry went into action under a heavy fire before the works to the south of the town. On the opposite side of the lighthouse were placed the bomb vessels, while the flotilla of gun, rocket, and mortar boats was distributed between the line-of-battle ships and the entrance to the mole.

Soon after the battle became general, the enemy's flotilla of gunboats advanced, when a single broadside sent 33 out of 37 to the bottom. The

whole of the Algerian frigates were burnt at their anchors and blown up, and by ten o'clock at night it was felt that the objects of the attack had been attained. The fleet had fired 118 tons of powder, 50,000 shot (weighing more than 500 tons of iron), besides 960 13- and 10-inch shells. The sea defences of Algiers, with a great part of the town itself, were shattered and crumbled to ruins. In the British ships 123 men were killed and 690 wounded, while the Dutch had 13 killed and 52 wounded. Lord Exmouth escaped narrowly: he was struck in three places; a cannon shot carried away the skirts of his coat, and another broke his glass. The losses of the Algerians were estimated at 7000. On the following morning the Dey acceded to all Lord Exmouth's demands, namely:—

1. **The abolition of Christian slavery for ever.**
2. The delivery of all slaves in the dominion of the Dey.
3. The repayment of all money received by him for the redemption of slaves since the beginning of the year.
4. Reparation and a public apology to the consul.

The total number of slaves liberated, including those freed a few weeks before, were—

At Algiers	1642
Tunis	781
Tripoli	580
	3003
Total .	

The **battle of Algiers** forms a class by itself amongst naval victories; it was a new thing to place a fleet in a position surrounded by formidable batteries. Nor was it less happy in its results: it broke the chains of thousands, it gave security to millions, and it delivered Christendom from a scourge and a disgrace.

1817 to 1818. On the 3rd of September 1817 Omar Dey was murdered, and succeeded by Ali Khoja, who, to save himself from sharing the fate of so many of his predecessors, left his palace in the city and took up his residence in the Casba, at the summit of the town, whither, on the previous night, 350 mules had transported his treasure, estimated at 300 millions of francs.

In the spring of 1818 the plague again made its appearance, and amongst its victims was the Dey, who died on the 1st of March.

1818 to 1830. No sooner was the breath out of his body than the Divan proclaimed Hussein-Khoja, minister of the interior, Dey in his place, and he was the last who ever sat on the throne. He speedily turned his attention to the reconstruction of the fleet burnt by Lord Exmouth, and in 1820 he had forty-four vessels, manned by 1560 sailors.

Since the treaty made by Lord Exmouth the Dey found it impossible to obtain Christian slaves for his public works; he was therefore driven to fill his Bagnio with Kabyles, and even the private servants of the consuls were not spared. The British consulate was violated in the search for certain Kabyles; this brought about a rupture between Great Britain and

Algiers, and the consul, Mr. McDonell, was forced to embark and leave the place. In July 1824 a naval division of six sails appeared before the place, while ten more remained out at sea. There was a slight engagement which lasted three hours, but the Dey persisted in his refusal to receive Mr. McDonell. Algiers was blockaded till the 24th, when there was a second engagement. Eventually the affair was patched up, and Admiral **Sir H. Neale**, who commanded the squadron, made two concessions to the Dey, the weaker that they were secret,—namely, that the British flag should not be hoisted on the English consulate in Algiers, and that Mr. McDonell should not return as consul.

When Mr. St. John succeeded him all the disgraceful ceremonies in the intercourse between the representative of Great Britain and the Turkish authorities were continued. The consul was obliged, the moment he came in sight of the Dey's palace, to walk bareheaded in the hottest sun; in waiting for an audience he had to sit on a stone bench in the public passage; he could not wear a sword in the Dey's presence, nor ride to the palace, though his own servants, if Mohammedans, might do so.

In spite of the chastisement inflicted by Lord Exmouth, and the daily threat made by the representatives of European nations at Algiers, their corsairs continued to infest the seas till the very last; and after the abortive attempt of the English to secure the return of their consul, the audacity and perfidy of the Algerian Government knew no bounds, and the most solemn treaties were regarded as so much waste paper.

The subject of the dispute which eventually accomplished its downfall was the claim of a Jew named Bacri, on account of stores supplied to the French Government during Napoleon's wars. This had been regulated by common accord at 7 million of francs; and, at one of the interviews which the consul had with the Dey on the subject, the latter is said to have struck him on the face with his fan.

This conduct, for which he refused to make any reparation, served as an excuse to the French Government to send an expedition against Algiers; and the town was blockaded during three years in so inefficient a manner as to excite the ridicule of the Turkish officials.

On the 14th of June 1830 a French army, commanded by **General de Bourmont** and **Admiral Duperré**, consisting of 34,000 men, landed, with little opposition, at Sidi Ferruch. It is worthy of remark that all previous attacks on Algiers had been made from the east; and that the suggestion to effect a landing at this point was first made in the work of Mr. Shaler, Consul-General of the United States at Algiers,¹ a suggestion which was followed exactly by the invading force. On the 19th of the same month the battle of Staouéli was fought, and on the 24th that of Sidi Khalef.

On the 4th of July the French arrived in front of the town, and opened fire on Fort l'Empereur, which was abandoned at 10 A.M. by its garrison, who set fire to the powder magazine. The Dey now sent for the British Consul-General, and requested him to go to the French camp and ascertain the commander-in-chief's conditions.

¹ *Sketches of Algiers*. Boston, 1826.

These were that the town should be surrendered at ten o'clock the next morning, whereupon the Dey's person and property should be respected. On the following day, 6th July, the Dey signed this convention, and at 1 P.M. the French troops entered the town and took possession of the forts.

Hussein Pasha embarked at Algiers on the 10th, with a suite of 110 persons, of whom 55 were women. He first fixed his residence at Naples, and subsequently at Leghorn, and eventually in Egypt. Mohammed Ali Pasha received him with the consideration due to his rank and misfortunes, when one day, after a private audience, Hussein retired to his private apartments, and died, it is said, a few hours afterwards, in violent convulsions.

At the conquest the Regency was considered in a flourishing condition, and nearly 2 millions sterling were found in the Turkish treasury, a sum more than sufficient to defray the expenses of the war; nevertheless, the united value of the imports and exports at Algiers did not then exceed £175,000 per annum. Algiers, Blidah, Cherchel, and Bône, were the only really flourishing towns of the Deylick; all the rest of the Tell, with the exception of Kabylia, was occupied by the petty clients of a limited number of rich families, who thought much more of defending their crops against the attacks of their neighbours than of advancing the public prosperity. Each tribe lived apart on its own resources, ever on the alert to repel assailants; there was no such thing as a commonwealth, no means of communication, and hardly any commercial transactions.

The French army, being firmly established at Algiers, began at once to extend its operations. General de Bourmont sent in the same month an expedition to Blidah, and took temporary possession of Mersa el-Kebir to the west, and Bône to the east. Upon the revolution of July, and Louis Philippe's acceptance of the crown, it became doubtful whether the conquest of Algeria would be carried on, and the generals withdrew their troops from all the towns excepting Algiers. In September, however, Marshal Clauzel, under the orders of the new authority in France, replaced General de Bourmont. The policy of Marshal Clauzel was to place tributary Beys in the different towns; but the natives, who had at first received the French without suspicion, now made a vigorous resistance.

The most serious opponent whom the French had to encounter was the well-known **Abd-el-Kader**, a man described by Marshal Soult as one of the only three great men then living, all Mohanmedans, the other two being Mohammed Ali, Pasha of Egypt, and Schamyl.

Abd-el-Kader was born in 1808, in the plains of Ghris, near Maskara. His father, Mahi-ed-Din, belonged to a family of *Cherfa*, or descendants of the Prophet, and was himself renowned throughout Northern Africa for the piety of his life and his active charity.

When Abd-el-Kader was about nineteen years of age his father took him to perform the pilgrimage to Mecca and Medina, and to visit the tomb of Sidi Abd-el-Kader El-Jailani, at Baghdad. They performed a second pilgrimage to Mecca and Medina, and returned to their native country after an absence of two years.

After the fall of Algiers, the order which the Turks had managed to

preserve by terror amongst the Arab tribes gave place to anarchy; one tribe rose against another, private vengeance or a thirst for plunder filled the country with marauders, the markets were abandoned, well-disposed persons withheld their produce, and famine threatened to succeed plenty.

The inhabitants of Tlemçen implored the Sultan of Morocco to send a prince of his family to become their Sultan, but the diplomatic efforts of the French prevented the realisation of this project. Si Mahi-ed-Din was next proposed, but he excused himself on account of his great age, and all he would consent to do was to take command of the Arab tribes sent to disturb the French in their new possession, Oran. Here it was that Abd-el-Kader began to be distinguished, and before he had attained his twenty-fourth year he was hailed by the warlike tribes of Hachem and Beni Amer as their Sultan, and immediately proceeded to Mascara to proclaim and preach the *Jehâd*—holy war against the infidel. Thence he despatched his emissaries to invite all the tribes around to send contingents to his forces, and appointed January 1833, before the walls of Oran, as the time and place for opening the campaign. He expected that few save his own followers would accept the invitation, but he made his attack nevertheless, and though he was repulsed he proved his own earnestness, and sealed, as it were, the covenant with the blood of his family, his nephew having been killed by the French. The next few months were occupied by him in attempting to bring about a spirit of unity amongst his tribes; and his absence from the neighbourhood of Oran induced the commandant of that place, General Desmichels, to commence the offensive, which he did by the occupation of Arzeu and Mostaganem. Abd-el-Kader tried in vain to prevent it, and spent the rest of 1833 in consolidating his own power by the occupation of the important city of Tlemçen. A series of engagements followed, and prisoners were captured on both sides; the first overtures of peace, however, came from the French; and on the 4th of February 1834 a treaty was concluded between General Desmichels and Abd-el-Kader, in which the position of the Emir was distinctly recognised, but no recognition on his part of the sovereignty of France was even implied. The form of the treaty displayed the most culpable negligence; each of the contracting parties drew up a paper of conditions, which was signed by the opposite party; and it was only the French paper, signed by the Emir, which received the ratification of Louis Philippe. This was, however, unknown to Abd-el-Kader, who believed that his terms were as binding on the French as their terms were on him.

The Emir had now time to turn his undivided attention to the organisation of his own government; he received considerable presents of arms and ammunition from the French, and began to raise a standing army, and to crush one by one the rivals who had hitherto refused to recognise his supremacy; and in a short time he was undisputed master of the entire province of Oran, which he held not so much by his sword as by the love and admiration of all those wise enough to prefer order to anarchy.

The tribes in the other provinces began to turn their eyes towards so prudent and powerful a chief. A deputation from Médés implored him to undertake the government of Titeri, which he did, and installed Khalifas

of his own as governors of Milianah and Médéa. To the latter place the **Governor-General d'Erlon** sent a mission under Captain St. Hippolyte, with presents, offering to substitute another treaty for that concluded by General Desmichels. The Emir suddenly resolved to return to Maskara, and induced the French mission to return in his suite, which produced an immense effect in his favour amongst the Arab tribes. Immediately on his arrival there he dismissed the mission with a statement of the conditions on which he would consent to treat with the Governor-General, which were in effect a mere revival of those in the Desmichels treaty.

It was not long after this ere hostilities again broke out between Abd-el-Kader and the French; the pretext was afforded by two important tribes placing themselves under the protection of the French at Oran, which was considered by the Emir as a breach of existing conventions.

Then came the disastrous expedition against Constantine (*q.v.*), and shortly afterwards the celebrated treaty of the Tafna (30th May 1837), by which France abandoned to the Emir nearly the whole of the province of Oran and two-thirds of that of Algiers, reserving only to themselves Oran, Mostaganem, and Arzeu, with their territories in the former; and in the latter, Algiers, the Sahel, and the Metidja, including Koléa and Blidah.

This state of things could not last long, and when the French had taken Constantine, a dispute regarding the limits of the Metidja and the advance of the army under **Marshal Valée** and the Duc d'Orléans through the Portes de Fer, were considered by the Emir as a breach of the treaty. The French were nothing loth to extricate themselves from a position which had become exceedingly inconvenient, and on their part commenced offensive operations.

Once more Abd-el-Kader raised the standard of a holy war, and massacres of Europeans took place throughout Algeria. In return the French generals extended their conquests on every side. Cherchel fell, Médéa and Milianah were once more occupied, and a desultory warfare was carried on till 1841, when **General Bugeaud** became governor. He commenced a campaign in which the Prince de Joinville and the Ducs d'Aumale and de Nemours served under him. In July, Tekedemt, Boghari, Taza, and Saïda, towns on which Abd-el-Kader depended, were destroyed, and he was hunted through the country, till, his camp being taken, he was driven to take refuge in Morocco at the end of 1843. The Sultan of that country made him Khalifa of one of his border provinces, and his attacks upon the French while in this position involved his protector in a war. This war terminated in a great victory of the French, 14th August 1844, where General Bugeaud won for himself the title of Duc d'Isly, and, by a treaty in March 1845, Abd-el-Kader lost his asylum in Morocco. He did not on this account relinquish his endeavours to harass the invaders of his native country, but took advantage of the discontent which was fomented in Algeria by Bou-Maza (the man with the goat) to join forces with him; and when his partisans were crushed at the combat of Aïn-Kebira, 13th October 1845, he sought the support of a new Sultan of Morocco. This ally was defeated, 24th March 1846, by General Cavaignac, and Abd-el-Kader, deserted by his adherents, who began to lose their superstitious reverence for him and to tire of his imposts, was

driven from mountain to mountain, showing to the last an indomitable courage. Surrounded on every side by enemies, and with numbers reduced to his mere personal following, he gave himself up, on 21st December 1847, to General de Lamoricière, at Sidi Brahim. His submission was received by the Duc d'Aumale, then governor of Algeria, on the 23rd; and two days later he was despatched to Toulon with his family and servants. He remained there till 2nd November 1848, when he was removed to the castle of Amboise, near Tours, and was released by Louis Napoleon, 16th October 1852, after swearing on the Koran never again to disturb Algeria. He went at first to Broussa, and being driven thence by an earthquake, went to Constantinople, and subsequently settled at Damascus, where he died.

The struggles of the natives did not cease with the subjection of Abd-el-Kader, though previously Si Hamed-ben-Salem, his Khalifa, and Bel-Kassem, second in command, had given themselves up; and in the same year Bou-Maza and Mulai Mohammed, an agitator of Kabylia, surrendered, and promised to use their influence on the side of peace. The troubles in France during 1848 encouraged the Arabs to make fresh efforts in all the three provinces, but they were put down by timely severities. The hardy natives of Kabylia continued to give the most trouble, and the successive expeditions against them might be illustrated by as many tales of daring and devotion as of cruelty. It was not till the end of 1857 that the French spoke of the mountainous region as entirely subject to them. Among the generals who rendered themselves celebrated in these campaigns are the names of Changarnier, Cavaignac, Péliissier, Canrobert, Saint-Arnaud, and MacMahon. The resistance each year grew less and less, and the colonists were established on a firmer footing.

The years 1866 and 1867 were the most disastrous since the French conquest. A prolonged and excessive drought produced a failure of crops all over the country; dried up the sources of the springs; whole tribes were deprived of their means of subsistence, while the stagnant and polluted water, which alone they could procure for drinking purposes, induced a visitation of cholera which carried off tens of thousands.

One of the severest invasions of locusts ever known, which occurred in 1866, caused the destruction of much of what the drought had spared, and in January 1867 an earthquake destroyed several villages in the Metidja, and seriously injured many more. Not less than 200,000 perished during these two years from the effects of pestilence and famine.

In 1871 a serious **insurrection** broke out, but before commencing a narrative of it, it is necessary to glance at the state of Algeria and the events which transpired there after the declaration of war between France and Germany. At that period the colony was perfectly tranquil, and even the defeats sustained by French arms in the opening battles of the campaign did not materially alter the aspect of affairs, but rather created a desire amongst the native races to avenge their brethren who had fallen fighting side by side with their conquerors. But after Sedan a very marked change began to appear. The fall of the Emperor was sincerely regretted by the great Arab chiefs, who had been his honoured guests at Compiègne; while the excited

condition of the public press, and the impolitic measures of the government of Tours and Bordeaux, especially the naturalisation *en masse* of the Jewish inhabitants, inspired them with serious fears for their own position.

On the other hand, the colony was entirely denuded of troops, and the old and experienced officers of the Bureau Arabe had almost all quitted their posts for active service in France.

The first act of the insurrection took place in January 1871, at Souk Ahras, where a Smala of Spahis mutinied, and being joined by the adjacent tribes, more or less connected with them by family ties, devastated the farms around, murdered some of the colonists, and endeavoured ineffectually to obtain possession of the town. The insurgents were speedily repulsed by a column from Bône, and obliged to seek refuge in Tunis.

About the same time the wandering tribes occupying the Oued-el-Kebir between Philippeville and the sea broke out and attacked the little town of El-Mila; a detachment from Collo soon suppressed the disturbance. No sooner was it put down than it broke out again in the south and south-east, where Mahi-ed-Din, son of the Emir Abd-el-Kader, and Bin Chohra, an old Algerian insurgent who had taken refuge in Tunis, had circulated letters amongst the tribes exciting them to revolt. The column which had restored order at El-Mila marched to the frontier, overthrew the rebels before Tebessa, and drove their leaders to the south.

This insurrection could not fail to produce a corresponding effect in the desert; old family feuds and rivalries broke out under the pretext of combating the insurrection, one chief waged war against another; numerous razzias were made, and very soon the whole Sahara was in flames.

Tuggurt was besieged by the Cherif Bou Choucha, as was also Ouargla; the garrison of the former place was massacred, the property of the State was plundered, and order was not perfectly restored there till quite the end of the year, when all the rest of the country had been pacified. Bou Choucha remained at liberty in the oases of Ain Salah till April 1874, when he was taken prisoner by Said, brother of the Agha of Ouargla.

This insurrection was embarrassing to the French, but it was not of extreme gravity, as the events of the south, dependent as it is for supplies on the Tell, can never exercise a serious influence on the general condition of Algeria. The situation of the colony therefore was critical, but not seriously compromised, when the preliminaries of peace with Germany were signed. Already some troops had arrived, and the return of the prisoners of war would soon place an army of seasoned veterans at the disposal of France. This was the time selected for the outbreak of a violent aggression, which might have been serious some months before, but of which the issue could never be doubtful from the moment that France was able to dispose of all her resources. The affairs of the Commune at Paris might have inspired some hope of success, but this could not have been foreseen when the events about to be related occurred.

The village of Bordj-bou-Arreredj, the scene of the first serious devastation of the insurgents, is situated about 72 kilomètrés from Setif, in the middle of the tribe of the Hachems, and is the European centre nearest to the

territory in which Si Mohammed bin El-Haj Ahmed El-Mokrani exercised his authority.

He had been for many years Kaid of his tribe, but to augment his prestige, and in the hope of making him a faithful vassal of France, he was promoted to the dignity of Bach-Agha of the Medjana. His influence was very great: he was an intimate personal friend of some of the most distinguished French generals, and had been a frequent guest at the imperial *fêtes* at Compiègne. He, like many others, took great umbrage at the changes which had taken place in the government of Algeria, especially at the substitution of a civil commissaire of the republic for a governor-general such as Marshal de MacMahon; and when a decree was signed by M. Cremieux circumscribing his command, and constituting part of his territory civil, he is said to have exclaimed: "If my position is to depend on a Jew I renounce it, though I am willing to support anything from one who wears a sword, even if he use it on me." Another cause which probably led this great chief into rebellion was the embarrassed condition of his affairs. Treated like a prince in Paris, he had spent large sums of money in the most lavish manner; loan succeeded loan; ruin appeared inevitable; and he not improbably hoped in some manner, hardly defined to himself, to retrieve his position by force of arms.

Another great chief was Si Mohammed Saïd bin Ali Cherif, Bach-Agha of Chellata, possessing almost as much influence in Kabylia as Mokrani did in the Medjana, and far more venerated than he, being the lineal descendant of a celebrated saint. He had, however, of late years lost a considerable amount of his prestige, and with it the offerings which the faithful used to bring to the shrine of Chellata, owing to the correspondingly increased power obtained by the superior of the order of *Khouans*, the chief of the religious confraternity of Sidi Mohammed bou Koberain, the Sheikh Mohammed Amzian bin Ali el-Haddad, or the blacksmith. The sons of this Sheikh, M'ahmed and Azziz, enjoyed nearly as great power as their father: the former, a religious fanatic, had already played a part in a previous insurrection; the latter—younger, dissipated, and ambitious—was ready to join in any scheme likely to gratify his vanity or increase his importance.

It was necessary, however, for the common cause that the old rivalry between these two houses should disappear, and through the mediation of Mokrani a reconciliation took place between Bin Ali Cherif and Bin el-Haddad. It was then arranged that Mokrani should be chief of the plain, Si Azziz of the insurgents, and that Bin Ali Cherif should remain with the French authorities at Algiers, to communicate all that transpired there.

On the 18th February five Europeans were murdered at the Portes de Fer, where some roadmaking was going on, and a month later Mokrani sent in his resignation as Bach-Agha, and followed this up by a formal declaration of war.

He then laid siege to the town of Bordj-bou-Arredj, pillaged all the outlying farms and buildings, and even drove the garrison into the fort, whereupon the town was occupied by the enemy, plundered, and set on fire. The insurgents adopted every means, some of them, such as mining, hitherto unheard of in Arab warfare, to reduce the place, but in vain. After a siege

of twelve days, during which time there was much bloodshed and suffering, and the town reduced to a heap of ruins, the fort was relieved by a column from Setif.

It would be tedious to follow all the operations which ensued. Mokrani succeeded in destroying isolated posts and houses, burning villages, and massacring colonists surprised in the open country or on the roads; but all his efforts to take fortified places failed, and everywhere in the field his men were defeated with great slaughter. The French, at one time reduced to the defensive, had begun to assume the offensive—it was at this moment, when the insurrection appeared almost overcome, that, like a train of gunpowder, it spread over Kabylia at the voice of the Sheikh el-Haddad.

This remarkable man was held in the utmost veneration from Morocco to Tunis: his limbs were completely paralysed; he had passed the last twenty years of his career in a small, dark, filthy cell, where the pious came in crowds to see him through a small window in the side, happy if they were permitted to kiss the hem of his garment.

His sons placed themselves at the head of vast hordes of Kabyles. Bougie, the seaport of the district, was besieged and entirely cut off from all communication with the interior, from the 18th April to the 30th June. The farms, oil mills, public buildings, and everything belonging to Christians throughout Kabylia, were destroyed. Dellys and Djidjelly were in like manner invested, and all the outlying farms ruined. Fort National (then called Fort Napoleon), the French stronghold in Western Kabylia, supported a siege of sixty-three days with great courage and endurance. The garrison of Tiziouzou was likewise blockaded in the fort, and the village destroyed. The village of Palaestro was attacked and burnt after a short but heroic resistance; nearly all the males, fifty-four in number, were massacred, and forty individuals, of whom thirty-two were women and children, were carried off, and only released at the termination of the campaign, after twenty-two days' captivity.

But now the affairs of the Commune at Paris being over, reinforcements began to arrive from France, the beleaguered towns were relieved, the principal leaders were taken prisoners, and such as escaped were pursued as far as the desert, when they were forced to surrender.

The decisive battle of Mokrani's campaign took place at Souflat, thirty miles from Palaestro, where his forces were routed and he himself killed.

His death was as noble as his life had been; he had promised General Durrieu, the acting Governor-General, that he would remain faithful to France so long as she should be at war, and it was not till peace had been signed that he sent a formal declaration of war, resigned his functions, gave up his cross of the Legion of Honour, and permitted forty-eight hours to elapse before commencing hostilities. Now that he had staked and lost his all, pursued in every direction by French columns, seeing that the whole colony was being covered with troops, nothing remained for him but an honourable death. He descended from his horse at the battle of Souflat, and on foot at the head of his men he fell pierced with a ball in the forehead.

One more outbreak took place to the west of Algiers, in the mountain

district inhabited by the Beni Manassir, between Milianah and the sea. Cherchel was blockaded for a month. The inland village of Zurich, which had been hurriedly protected by a stockade, was gallantly defended during many days by thirty militia and forty military prisoners, most of whom were enfeebled by fever; but, despite the vast disparity of combatants, every village, however slightly fortified, held out successfully, though all the intervening farms, about eighty in number, were sacked and destroyed, and the guardians murdered.

By the middle of August 1871 the insurrection was thoroughly extinguished, and such of the principal leaders as were not killed in action were reserved for future trial, and those who had not participated in any actual massacres were treated with great leniency.

The submission of the revolted tribes, however, was only accepted on the condition that they should consent to disarmament and to the imposition of a war contribution, which was fixed at 30 millions of francs. A general sequestration of landed property was also ordered, but the owners were permitted to resume possession of it in many instances on comparatively easy terms. From this a liberal allowance was made to those who had lost either property or near relatives in the insurrection. The farms and villages were rebuilt on a better scale, the population was increased by the arrival of numerous immigrants, principally from Alsace and Lorraine, and numerous centres were created even in the heart of Kabylia.

An **insurrection** broke out in the Aurès mountains in May 1879, in the territory of the Touaba, or Oulad Daood; it was headed by an obscure Marabout named Mohammed bin Abdulla, imam of the Mosque of Hammama, who succeeded in collecting round him a band of discontented Chaouia and vagabonds of all sorts. The commandant of Batna sent two native horsemen to apprehend him, which they actually did, but they were cut to pieces by his followers, and the Marabout was rescued. This was the commencement of hostilities. The insurgents then attacked the Smala of Si el-Hachemi, son of the Kaid Bou-Dhiaf, at Medina; he was not strong enough to resist them, and retired to Batna. They then proceeded to the village of T'Kout, in the Bordj of which resided the Kaid Bachtarzi; him also they killed, but they spared his followers, on condition that they recognised the divine mission of the Marabout. On this becoming known at Batna, the commandant ordered Si Bou-Dhiaf, Kaid of the Oulad Daood, to proceed against the insurgents. He had no force save twenty or thirty followers, to whom were added an officer of the Bureau Arabe, and a few Spahis. On the night following their arrival at their first halt, near Hammama, they were attacked by the Marabout's forces, and although Bou-Dhiaf defended himself with the traditional courage of his race, killing four enemies with his own hands, he was slain, and his troops had to retreat, leaving their dead, wounded, and baggage in the hands of the insurgents. Emboldened by success, they proceeded to attack the Bordj of Si Bel Abbas, Kaid of the Oulad Abdi; he himself was absent, but it was occupied by his son Si Lahsen and a few retainers. It was speedily taken, and the young chief and his retainers were massacred. Recruits now began to join the standard of the Marabout from every direc-

tion, but the authorities were alive to the importance of the movement, and columns began to advance towards the Aurès from Constantine, Batna, and Biskra. An action took place at El-Arbâa, between an advance guard of the Batna column and 1500 insurgents; the latter were completely routed, leaving 400 of their number dead on the field. The French penetrated to the very heart of the mountains, pacified the country, and compelled its inhabitants to agree to the terms proposed by the Governor-General, namely, the delivery of hostages, the payment of an indemnity, and the surrender of the principal instigators. The insurgents fled before the French troops to the south, till at last, in an attempt to reach Négrine, the remainder of these unfortunates, to the number of three or four hundred, perished of thirst and fatigue in the Sahara. The Marabout succeeded in reaching the Jerid of Tunis, but he was subsequently delivered up to the French, and, with his principal accomplices, was tried by a court-martial at Constantine. He and twelve others were condemned to death, twenty-six to various periods of imprisonment, and sixteen were acquitted.

In 1879 a commission was formed at Paris to study the question of railway communication between Algeria and Senegal by the Soudan; several scientific expeditions were organised; amongst others, Colonel Flatters explored the country between Tuggurt and the 26th degree of N. latitude. In the following year he was again sent to complete the task which he had so successfully commenced. His mission left Ouargla on the 4th of December 1880, and consisted of 11 French, 47 native tirailleurs, 32 camel-drivers, 8 Chamba guides, and a certain number of Touaregs, together with 100 riding camels and 180 camels of burden. It followed the Oued Mya, and thence directed its course towards the Sebkhâ of Amad-Ghor, passing by Hassi-Messeguem and Amguid; up to that time everything went well, and the last news received from it was dated 29th January 1881.

On the 28th of March following, four of the survivors reached Ouargla, and brought the intelligence that at four days' march from Hassiou, Colonel Flatters had been led into an ambush, that part of the mission had been massacred, and that all the camels had been carried off. The survivors, fifty-six in number, of whom five were French, endeavoured to retreat to Ouargla, a distance of 1500 kilomètres, without means of transport, and almost without provisions. Harassed by the Touaregs, and dying of hunger, they lost many of their number, but the *débris* of the mission still continued to advance, under the command of Maréchal-de-Logis Pôbeguin, the last surviving Frenchman. The Khalifa of Ouargla hastened to send out an expedition in search of these unfortunate people; they were found in the month of April at Hassi-Messeguem; the party then consisted only of twelve; no Frenchman had survived. In addition to these twelve men and the Chamba guides, who had disappeared on the day of the massacre, seventeen men turned up afterwards.

Shortly after this the assassination of Lieutenant Weinbrenner became the signal for insurrection in the south of Oran. A clandestine emigration was observed in the direction of the Tunisian Jerid; in May disturbances were signalled in Djebel Amour, and a small column was sent out from

El-Aghouat in the direction of Aflou and Tadjerouna. It here received considerable reinforcements, and inflicted a severe lesson on the El-Aghouat Ksel, which restored confidence amongst the tribes in the department of Algiers. This was followed by the despatch of a column to visit successively M'zab, Metleli, Goleá, and Ouargla; it returned to El-Aghouat on the 1st of February.

Early in April the Bach-Agha of FrenDAH reported to the French authorities that disaffection existed amongst the tribes at Tiaret, Geryville, and Saida, and that it was being fomented by a Marabout named **Bou-Amama Bel-Arbi**, who belonged to the great religious family of the Oulad Sidi Cheikh. This fanatic gave himself out as the agent of God destined to drive the French out of the country of the Arabs: orders were given to arrest him, and it was in attempting to execute these that an officer of the Bureau Arabe at Geryville, M. Weinbrenner, was massacred, with nearly all his escort, on the 22nd of April; at the same time the telegraph between Geryville and FrenDAH was cut. This was the signal for a general insurrection in the south; *goums*, or columns of Arab horsemen, sent to attack the insurgents, deserted to or fled before them. On the 11th and 12th of June they made a rapid attack on the workmen, nearly all Spanish, engaged in collecting Alfa grass to the south of Saida, and massacred great numbers of them. This created a panic amongst the Spanish colony, and in a few days 10,000 of them fled from Algeria to their native country, whence, however, they very soon returned.

In July the well-known Si Suleiman bin Kaddour appeared on the scene, and collected around him many tribes which had not joined Bou-Amama, and thenceforth he became the veritable chief of the insurrection.

Military operations against the Arabs at such a time and place were almost impossible. As soon as the weather began to get cool, expeditionary columns scoured the country in every direction, and did what was practicable towards restoring order, but the chiefs of the insurrection never were captured.

In one of these expeditions Colonel Negrier committed an act which the Arabs will never pardon or forget; he destroyed the tomb of Sidi Cheikh, the great saint of the Sahara, and transported his ashes to Geryville. This act gained him great popularity with the extreme party in Algeria, and it was never formally repudiated by Government; but some time after the tomb was reconstructed, and the saint's bones once more deposited in it, at the expense of the State.

In November 1882 the territory of the **Beni M'zab** (see pp. 12, 20) was annexed to Algeria, and taken possession of by a column under the command of General the Prince de la Tour d'Auvergne. The reason assigned was that sanguinary struggles were constantly taking place there, and that it had become a rallying point for all the disaffected tribes in the south.

§ 9. GOVERNMENT OF ALGERIA.

Before the German war the military rule in Algeria had as an essential character, the union of the command of the troops and the political and
[*Algeria*]

administrative authority in one person. This régime reached its culminating point under Marshal de MacMahon in the subordination of the prefects to the generals commanding the divisions or provinces, but its want of success ended in predisposing the *Corps Législatif* against it, and in the session of 1870 it was decided to introduce, to a certain extent, civil government. The revolution of September 1870 hastened the fall of the military authority, and the Government of the National Defence fixed the basis of civil government, and removed Algeria from the control of the Minister of War. The office of sub-governor was entirely abolished, and a civil governor-general appointed, under whom the government of the whole colony was centralised at Algiers. At first a separate general officer was appointed to command the entire military and naval forces, having under him generals commanding the three provinces. Subsequently, the first appointment was abolished, and each of the generals commanding provinces was made independent of any central authority and subject only to the Minister of War in Paris. The inconveniences of this system were so strongly felt during the administration of the first civil governor, that although the principle was not modified, a military officer, **General Chanzy**, was appointed to the office of civil governor-general, and invested with the chief command of the military and naval forces.

On the fall of Marshal de MacMahon's government, **M. Albert Grévy** was sent as civil governor-general and *commandant des forces de terre et de mer*. He was received with enthusiasm by the colony, not only on account of his relationship to the President of the Republic, but as the representative of an entirely new state of things, to introduce civil government and the common law in supersession of the arbitrary rule of the Bureau Arabe. On his departure, after two years and a half government, it was the universal opinion of the colony that his resignation was the only satisfactory act of his career. He was succeeded by **M. Tirman**, who was not invested with any military powers.

In March 1891, on an interpellation by M. Didé, a lengthened discussion took place in the Senate on the situation of Algeria. A Senatorial Commission of Inquiry was appointed. M. Tirman resigned the government after a longer tenure of office than that of any of his predecessors, and **M. Jules Cambon**, Préfet of Lyons, was appointed in his stead. He landed at Algiers on the 13th May.

The old institution of *Bureaux Arabes*, now called the *Service des Affaires Indigènes*, was placed, by a decree dated 12th May 1879, under the direct control of the governor-general, although a small and yearly decreasing extent of territory is still administered by the military authorities, represented by the commandant of the 19th Army Corps.

This service consists of—1. A Central Bureau at Algiers; 2. Divisional Bureaux at Algiers, Oran, and Constantine; 3. Subdivisional Bureaux; 4. Bureaux of Circles; and 5. Bureaux of Annexes. The departments of the Interior, Justice, Public Worship, Finance, Postes, Public Instruction, Commerce, Agriculture, and Public Works, are each under their respective Ministers in Paris; but these have conferred on the governor-general the power to dispose of the whole or part of the credits given to them by the

budget in order to provide for the expenses of the government-general in Algeria.

Each of the three provinces or departments is administered by a prefect, as in France, but always under the superior authority of the governor-general.

The governor-general is further assisted by a council of government composed of the principal civil and military authorities, which studies the various projects brought forward, and gives its advice to the Government; a superior council, meeting once a year, to which delegates are sent by each of the provincial general councils, is charged with the duty of discussing and voting the colonial budget.

Algeria sends three senators and six representatives to the National Assembly—namely, one of the former and two of the latter for Algiers, Oran, and Constantine.

Each department or province in Algeria has a general council composed exclusively of French and natives; the foreign element permitted under the Empire is now excluded. The number of each council is fixed at 36—namely, 30 ordinary members, French citizens, elected in Algeria, and 6 native assessors, named by the Minister of the Interior.

In the growing necessity which is now felt for extending civil government in Algeria, the rôle played by the army in times past should never be overlooked; its results are written in the great works everywhere carried out by it. After the conquest it pacified the country, and gave its first administration, such as it was, and such as circumstances permitted. Now that mission is to a certain extent accomplished; still purely civil government is only practicable in the districts entirely pacified, and containing a considerable European element.

The military force in Algeria constitutes the 19th Corps d'Armée of France, of which the commander-in-chief resides at Algiers. It is composed of three divisions commanded by generals of division at Algiers, Oran, and Constantine. These again consist of several subdivisions commanded by generals of brigade—namely, in the division of Algiers there are subdivisional commands at Algiers, Médéa, and El-Aghouat. In Oran there are four—at Oran, Mascara, Tlemçen, and Ain Sefra. The division of Constantine consists of three—Constantine, Batna, and Setif. There are also *commandants supérieures* of cavalry, artillery, and engineers, a *direction générale* of the *Intendance*, and another of the *Service de Santé*. An admiral commandant of marine resides at Algiers, and has under his charge the naval forces for the defence of the coast.

The following are the details of the troops in Algeria:—

Three regiments of Zouaves, 3 of Tirailleurs, 2 Foreign Legions, 3 battalions of Algerian light infantry, 3 Companies of Discipline, 5 regiments of Chasseurs d'Afrique, 3 of Spahis, 3 companies of cavalry of the remount, 12 batteries of Artillery, 3 companies of Engineers, 9 companies of the military train, 1 section of *état major* and *recrutement*, and several other subsidiary services.

There is also a reserve, or *armée territoriale*, consisting of 10 battalions

of *Zouaves*, 3 squadrons of cavalry, 10 batteries of artillery, and other subsidiary bodies.

The division of occupation in Tunisia is attached to the Corps d'Armée. It consists of 1 regiment of *Zouaves*, 1 regiment of *Tirailleurs*, 1 battalion of light infantry, 1 Company of Discipline, 1 regiment of *Chasseurs d'Afrique*, 1 of *Spahis*, 1 company of cavalry of the remount, 4 batteries of Artillery, 1 company of Engineers, 3 companies of the military train.

Frenchmen born in Algeria are only compelled to serve for one year in the army, instead of three years as in France, but they are bound to covenant that they will not settle in France during a period of ten years.

The regiments of *Tirailleurs* and *Spahis* are recruited amongst the natives, and contain only a limited number of French. Natives can rise to the grade of non-commissioned officer, sub-lieutenant, lieutenant, and, in the case of the *Spahis*, to that of second captain. All these natives are volunteers; they can prolong their service to thirty years, after which they have a right to pension. The old *Smalas* of *Spahis*, permitted to engage in agriculture, have almost disappeared, and will soon cease entirely to exist.

The Foreign Legions are recruited principally by deserters from the various foreign armies. There are a certain number of officers *servant au titre étranger* in these regiments.

The battalions of Light Infantry and the Companies of Discipline are *corps disciplinaires*, the former consists of men having been condemned by military tribunals, and the latter of men whose conduct is incorrigible.

Another body of troops is in course of organisation for the defence of the extreme south. The infantry will bear the name of *Tirailleurs Sahariens*, and the cavalry *Spahis Sahariens*.

§ 10. SPORT.

The shooting season opens about the middle of August, and closes in the beginning of February, except for birds of passage, which may be shot from the 15th of March till the 15th of April. No one is permitted to shoot without a license; persons desiring to obtain one should apply at the consulates of their respective nations. This applies principally to civil territory; in military districts the authorities are by no means particular: still the law is the same in both.

The shooting in the immediate neighbourhood of Algiers is not good, the country is becoming too settled; still there are places within easy range of town where hares and partridges may be found in considerable abundance. Snipe and wild ducks are abundant in the eastern part of the *Metidja*; woodcock can usually be met with in the marshes between the *Maison Carrée* and the *Gué de Constantine*, in December, and wild boar almost everywhere.

For larger game the traveller must go farther off, and ought to obtain the co-operation of the Arabs of the district. But travellers coming to Algeria with a sole view to sport will generally be disappointed.

The Government allows the following sums for the destruction of wild animals:—

Lions, 40 f. each ; panthers, 40—cubs of each, 15 f. ; hyenas, 15 ; and jackals, 2 f.

The following table is interesting, showing the numbers of each kind killed in Algeria from 1873 to 1884 :—

Animals.	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	Totals.
Lions	7	9	9	16	12	21	11	10	1	3	2	..	101
Lionesses	8	14	12	11	9	7	11	6	5	1	1	1	81
Whelps	1	..	1	5	2	3	3	..	..	..	2	..	17
Panthers	91	93	109	111	126	121	135	100	71	48	56	34	1,065
Do. young	8	9	8	8	17	30	15	12	5	4	..	8	119
Hyenas	220	200	217	194	241	156	114	141	64	132	102	101	1,882
Jackals	2523	2773	2916	3648	2919	2760	2175	2900	501	1468	1013	1584	27,185
Totals	2858	3098	3272	3988	3326	3098	2464	3169	647	1656	1176	1728	30,480

Lion and Panther Hunting.—The presence of a lion or panther is soon known by the numerous ravages committed amongst the flocks and herds in the district. The men of the tribe then assemble, and fix the day for hunting it. In the meantime eight or ten are appointed to watch its movements, and decide on the best method of attack. On the day appointed all come well armed. Five or six of the bravest and most agile are selected to undertake the dangerous task of forcing the beast to quit its lair. The tribe now divides itself into seven or eight groups, which surround the place where it is known to be, each group being connected with the next one by skirmishers. Those selected to attack now advance, accompanied by dogs, carefully examining every bush, and keeping themselves ready for any eventuality. The outer circle is gradually contracted, the dogs commence to howl and bark, and very soon the exact spot where the animal is concealed becomes known.

It generally remains stretched on its belly, its head resting on its fore-paws, till the dogs are within a few paces ; it then makes a bound on the nearest dogs, who usually pay for their temerity with their lives. While occupied with them it is attacked by the Arabs from every direction, but at a respectful distance, and is soon riddled with balls.

If it is killed outright the delight of the Arabs is boundless, but if only wounded they have to look out for their own safety ; if there is a horseman amongst them, it is generally on him that the beast fixes his attention ; and he requires a good eye, and his horse a sure and rapid foot, to effect an escape, while those on foot finish him off.

The lioness has her young ones about the end of January, and these remain with her, and, like her, make their voices heard at the first approach of danger. She defends them bravely, which the female panther does not always do. Ambuscades are also much used for shooting wild animals. A hole is dug, the bottom of which is an inclined plane of 45 degrees, just large enough to contain a man. The huntsman enters it, the top is covered over with boughs of trees and a thin layer of earth, leaving only a small hole for air and for the muzzle of his gun. In front of this is tied an animal, either

living or just killed, care being taken that the ambushade should be well to leeward of the direction in which the beast is expected to arrive.

Pitfalls are also constructed for large animals in the shape of an inverted funnel, covered over like the ambushades, and generally placed behind some natural obstacle which the lion would have to clear at a bound to reach the animal used as a decoy, generally a goat or sheep fastened to a picket.

Wild Boar Hunting.—The wild boar commits great destruction in cultivated fields, which it grubs up in search of the roots of arums and other bulbous plants, and it equally devours the grain when it reaches maturity. It is as much to extirpate them as to obtain their flesh that the Arabs chase the wild boar, which they do either from ambushades or in the open field. When they wish to have a *grande battue*, they collect three or four hundred men, of whom fifteen or twenty are well armed. The beaters drive the boars towards them, and sometimes a considerable number are killed and young ones captured.

Gazelle Hunting.—Gazelles are hunted either from ambushades or by riding them down. In the former case a certain number of persons conceal themselves behind brushwood or natural inequalities of ground, while others on horseback go out in search of a herd of gazelles and try to drive them to where their companions are posted. In the latter case, two or three men on horseback follow the flock at a gentle trot till the animals are tired, when, at a given signal, they gallop in amongst them, and when at forty or fifty paces distant fire at them with slugs; each Arab frequently kills his two beasts.

Bustard Shooting.—The bustard is found on all the plains of the south, and even in some parts of the Tell in the hot season; its flight is heavy, though tolerably long sustained. As soon as it perceives a man it tries to conceal itself behind a tuft of alfa or tall grass, follows every movement of the sportsman, and rarely allows him to get within shot except during the hottest part of the day, when it almost allows itself to be ridden over. The bustard in its flight has always an inclination to go in a circular direction; the Arab takes advantage of this peculiarity by getting beyond it, and, without appearing to follow it, endeavours to make it describe a gradually decreasing circle till he gets within range. He usually tries to hit it on the wing, in the hope of breaking a leg or a wing, as its plumage is so thick that it is exceedingly difficult to kill when running.

The lesser bustard, or *Poule de Carthage*, is common, and affords excellent sport.

Falconry.—The best falcons are found in Djebel Amour or the Sahara. Immediately a falcon is snared, its master covers its head with a leathern hood, and perches it on his shoulder, taking care to sew a thick pad of leather on that part of his *burnous*. It is left two days without food, and then it is fed on fresh raw meat, with the head uncovered. This is repeated twice every day, and in the intervals its master does all he can by caresses to tame it, and accustom it to captivity. In two or three months he begins to accustom it to search for its own food while still attached to him by a thin string; and even on the mornings of the days when it is subsequently

to be employed, he endeavours to let it see and almost attack a living quarry.

The falcons principally used by the Arabs are the Saker (*Falco sacer*), the Lanner (*Falco lanarius*), the Barbary Falcon (*Falco barbarus*), and the Peregrine (*Falco peregrinus*), all of which species breed in the country.

The trade of tamer of falcons is hereditary in certain families, and it is only the highest ranks of Arabs who can afford to indulge in this luxury. The falconers usually form part of their retinue.

An expedition of this nature is usually a great *fête* in an Arab tribe; it is frequently arranged to celebrate a marriage, or the visit of a person of distinction. A day is selected when the atmosphere is perfectly clear. The falconers are mounted on horseback, generally with three falcons, two on the shoulders and one on the head. Forty or fifty horsemen place themselves in a single line, thirty or forty paces apart, while others on foot beat the ground between them.

It is usually in the great plateaux of the south, covered with alfa, that this sport is practised. The moment a hare is started the falcons are unhooded, and allowed to see their prey. They at once soar into the air out of sight; the horsemen start off at full gallop, with loud cries; the birds poise themselves for a moment in the air, and then descend with deadly aim on their victim, which would soon be torn to pieces did the falconers not rush forward and regain their birds.

Not only hares, but partridges, bustards, flamingoes, and other large birds are thus hunted, and so precious are well-trained falcons that they are transmitted from father to son, and no money would tempt an Arab to part with one. The casual visitor to Algiers must not count on being able to enjoy much of this sport, unless he is on terms of intimacy with some of the superior French officers in the south of the colony, who might perhaps be induced to organise a day's "*Chasse aux faucons*" for his amusement.

Partridge Shooting.—The Arabs have several strange methods of shooting or killing partridges. One is to take advantage of the propensity which these birds have to huddle together in case of danger. An Arab covers himself with the skin of a lion, panther, jackal, etc.; and when he sees a covey frightened at his approach he fires into the middle of them, and not infrequently kills eight or ten at one shot. They are also frequently able to attract them at night by means of a lantern, and kill them with sticks.

§ 11. ZOOLOGY.

The **Fauna** of Algeria does not differ materially from that of the Mediterranean system in general. In the eastern portion it resembles that of Sicily and Sardinia, while in the west it approaches more nearly still to that of Spain. The presence of European birds in Algeria is of course easily explained; but there are many mammalia, fish, reptiles, and insects common to both countries. Some of these are no longer found in Southern Europe, such as the lion, panther, serval (*Felis serval*), hyena, jackal, golden fox (*Vulpes niloticus*), genet (*Genetta afra*); but abundant evidence of the existence of

these in remote ages is found in the caverns of the south of France. One species of genet, however (*Viverra genetta*), is very common in Spain, and the jackal (*Canis aureus*) is abundant in some provinces of European Turkey. The progress of civilisation in Europe has caused their disappearance, while Mohammedan barbarism has favoured their multiplication in Africa, a country little inhabited, and abounding in flocks and herds.

The lion is hardly ever found in the mountains of Kabylia, except sometimes in the Oued es-Sahel. Its favourite haunts are in the neighbourhood of Jemmapes, between Philippeville and Bône, and the back of the Djurdjura range, between the Oued es-Sahel and Aunale; it is now, however, rapidly approaching extinction. The panther is found more or less frequently all over the country, as are various other species of the cat and dog tribe. Moufflons or wild goat (*Ammotragus tragelaphus*) and gazelles are common in the south. The Algerian ape (*Inuus caudatus*) is found from the gorge of the Chiffa as far as the eastern limit of Kabylia. Their depredations are sometimes very serious, and the natives use every means in their power, short of shooting them, to drive them away. They entertain a superstitious dread of killing these animals, as they believe them to be the descendants of members of the human race, who, having incurred the Divine anger, were deprived of speech.

In the forest of the Beni Saleh, in the province of Constantine, red deer (*Cervus barbarus*) are still to be found, but they are becoming rarer every year, owing in a great measure to the destruction of the forest land by fire; there is too much reason to fear that they will soon become extinct. They may be found in the forest of Beni Saleh, and in the vicinity of Ghardimaou on the Tunisian railway.

One of the most important animals in Algeria is the camel, and the Arabs reckon their wealth by the number they possess. These animals, which live thirty or forty years, are not usually worked before five years of age, nor after twenty-five. They are docile and domestic, and are of incalculable value as beasts of burden in the desert, where no other animal could live for so long without water—one supply of which, every five or six days, suffices for them. They have also been successfully employed by the French generals as a means of transport for troops; but they can only be used in the Sahara, as north of the Atlas the climate is too cold. A good camel will carry a load of from 500 lbs. to 800 lbs., or even more, for a distance of 30 or 40 miles in a day. There is a larger variety, called by the Arabs "Mehari," which has hardly any hump, and which is used more for speed than for carrying burdens. It is capable of performing a journey of 80 to 100 miles, for several days in succession, keeping at a trot the whole distance. The food of the camel is grass and branches of trees, and sometimes barley and dates. When they are past work they are fattened for killing, the flesh being considered good and wholesome, especially the hump, which is the choicest part. The skin is used for several purposes, and the hair is used for weaving into various tissues, especially Arab tent cloth. The milk of the camel is a staple article of food amongst the Arabs.

The native cattle of Algeria are of excellent quality as a stock on which to

graft the better European varieties. They are hardy, and support admirably the alternations of heat and cold, wet and drought, to which they are exposed in the pasture-lands of the High Plateaux.

One of the great sources of wealth in this colony is its sheep, which are bred on the High Plateaux, where agriculture is impossible. Before the conquest the Arabs reaped hardly any advantage from their flocks, as they were to a great extent cut off from a market on the coast by the rapacity of the intervening tribes. For some years after the conquest two or three shillings was considered a fair price for a sheep; even in 1866 one could be purchased at the market of Bou-Farik, close to Algiers, for from nine to eleven shillings; now a similar beast fetches sixteen to twenty shillings, and when sent by rapid steam transport to France, it realises from thirty-two to forty in the Paris market, where during the summer more than 20,000 are sent every month.

Regarding the horse, the reader cannot do better than study the excellent work of General Daumas, *Les Chevaux du Sahara*.

The Ornithologic fauna of the coast district of Algeria closely resembles that of Southern Europe, though even in that portion of the country some birds are found whose occurrence in Europe rests upon very slender evidence; amongst these may be mentioned the Tchagra Shrike, the Dusky Ixos, the Ultramarine Titmouse, the Algerian Chaffinch, and Moussier's Redstart, all of which species are to be frequently met with in the neighbourhood of Algiers, and are often brought to the market of that city. In the High Plateaux and the Sahara many species of birds unknown in Europe occur, and the province of Constantine is especially rich. Amongst the more conspicuous birds of the mountains may be mentioned the Lämmergeyer, the Imperial, Tawny, Golden, and Bonelli's Eagles, and the Bald Ibis; whilst the Houbara Bustard, the Demoiselle Crane, and various species of sand grouse, occur in the vast plains of the interior.

Ostriches are found sparingly in the northern part of the Sahara, and more plentifully farther south, but are every year becoming more rare. They are gregarious, living in herds of five or six individuals. An ostrich skin with the feathers is worth on the spot from £10 to £25; but it is very seldom that one can be obtained that has not been more or less thinned by the Arabs. Ostriches, when pursued, always run in circles, so that while one party of horsemen follows the herd, another rides at right angles to a place affording a good look-out, endeavouring to discover the route taken by the birds. If they succeed in this they pursue them, and usually run down one or more, although some of their horses frequently fall exhausted before the chase is over. When running at full speed they can easily outstrip the horses, their stride being from 25 to 28 feet! Ostrich eggs are excellent eating. The shells are sold in Algiers, some coloured and mounted for ornament only, and others made into sugar-basins, cups, etc.

Fish.—Every species of fish that is found in the Mediterranean is caught off the coast of Algeria, among the most important of which are the tunny, sardine, sole, mullet, besides shellfish in great variety; the Algerian prawns, especially those of Bône, being of enormous size and delicate flavour.

The fresh waters of Algeria contain twenty-one species of fish, none of which are of much value from an economic point of view, with the exception of two species of barbel and the common eel. Of the number, five are peculiar to Algeria: the trout (*Salmo macrostigma*), which loves the cool and limpid water of the Oued Z'hour, and its affluents, flowing over beds of granite and gneiss through cool shady forests in the vicinity of Collo—this is the most southern of the salmon family; the *Tellia apoda*, a small cyprinodon, destitute of ventral fins, which has no known habitat save the spring of Bou-Merzoug, from which it never strays more than half a mile; the *Leuciscus callensis*, which peoples all the lakes and springs in the east of Algeria; the *Barbus setifensis*, which is found everywhere; and the *Syngnathus algeriensis*, peculiar to the Seybouse and the two streams which unite to form it, the Oued Cherf and the Bou-Hamdan; and a species of *Chromis* (*C. tristramii*) from the desert.

The fish fauna of the Tell and High Plateaux belongs exclusively to the Mediterranean system; the Sahara alone is linked to Africa by its *Chromidæ*.

Several attempts have been made to introduce other species as articles of food. The Arabs have never shown a very great liking for fish, and have never attempted to naturalise them, except in the case of the goldfish, which was prized rather for its beauty than for its economic value.

The first attempt to introduce European species since the French conquest was made in 1858 by MM. Kralik and Cosson, who brought to Constantine a barrel of young carp and the ova of various Salmonidæ. The latter were successfully hatched, and the young fish developed rapidly in the pure water of the cistern in which they were placed; but no sooner were they launched into the water of the river Roumel than their bodies and eyes seemed to get covered with a sort of calcareous film, and they speedily died. The carp, on the contrary, have succeeded admirably in the Basin of Djebel Wahash, and have multiplied amazingly. Some were put into the Roumel; but the Zouaves, informed of their translation, immediately set to work to catch them, and soon destroyed these new denizens of the river.

Attempts at pisciculture have also been made in the province of Algiers, where carp and, more recently, tench have succeeded perfectly in reservoirs.

At this point, however, the experiment has remained stationary, and no effort to naturalise the fish thus bred has been made. The question, as far as relates to the Salmonidæ, appears easy to resolve, after the experience gained at Constantine. Fish of this family require fresh and clear water not charged with calcareous deposits. These conditions are only possible on certain points of the littoral, particularly in Eastern Kabylia, and partly in that of Babor, where the streams rise on the sides of high mountains, preserving a temperature nearly constant, flowing on a bed of gneiss, granite, or schist, and protected from the rays of the sun by shady forests.

It is by no means uncommon for fish to be ejected by artesian wells; and this has formed the subject of numerous speculations. It has been concluded that these fish inhabited the vast subterranean sea which occupies the bottom of the Saharan depression; and it has been asked how, if they were destined

to live in perpetual obscurity, they were not destitute of eyes like the Sirens of the grottoes of Carniola or the Crustacea of the Mammoth Cave in the United States ?

We have already noticed the existence, from Biskra as far as Temacin, of *bahrs* or *gouffres*, which communicate with the underground sheet of water, and occupy too great a surface to be regarded as the enlarged apertures of fallen-in wells. All these apertures are inhabited by considerable numbers of Cyprinodons and Chromidæ. There they live freely exposed to air and light, and breed under normal conditions. Their underground life is merely an episode, and, as it were, an incident in the voyages which they undertake between one *bahr* and another. When they reach the neighbourhood of a well they are forced up with the water or obey an instinct to mount to the surface.

Snakes of various species occur throughout Algeria, but the only venomous one is the *Cerastes*, or horned viper, found commonly in the Sahara, but sometimes also in the High Plateaux. The tortoise, chameleon, scorpion, and a large species of lizard, called by the Arabs "Deb," are also found.

Mention must also be made of the *Locusts*, which are one of the plagues of Algeria, and appear every few years.

Until the eminent entymologist, Monsieur Künkel d'Herculais, studied the matter so carefully, no specific distinction amongst the locusts was recognised. He has now shown that there are two distinct species, belonging, in fact, to separate genera, each of which has very marked peculiarities. These are, the best known (Biblical) species, *Acridium perigrinum* and the former generally arrives unexpectedly about April or May, in immense flights, settling on and devastating the green crops. The females, by means of their protractile abdomen, penetrate deeply into the still moist earth, and deposit their eggs, from eighty to ninety in number, enclosed in a cocoon. Two months afterwards the young locusts or crickets are hatched; they grow rapidly, get their wings in forty-five days, and then continue their career of devastation far in advance.

The latter species appear in a winged state in July and August; they also ravage what green exists at that season, after which they unite, and the females deposit their eggs at a much less depth than the others, generally on rocky ground. The cocoons do not contain more than thirty or forty eggs, and they remain about nine months before being hatched, namely, till spring of the following year. The first species finds in Central Africa the most favourable circumstances for its development; the second, in more temperate countries, such as the Mediterranean region, and even the Caucasus, Crimea, and Asia Minor.

Fortunately man is not the only enemy of the locust. Vast numbers are destroyed by natural causes. Starlings and larks feed eagerly on the eggs; waggon-loads of these birds used constantly to be sent to the French market, now the killing of them has been prohibited in the province of Constantine, and this ought to be done throughout the colony.

The larvæ of the *Bombyx cantharis* and other insects also get into the

cocoons, and often kill from 10 per cent to 50 per cent of the eggs, while minute cryptogamic organisms destroy many more.

It is now admitted that the most efficacious means of waging war on the locusts is to concentrate all available resources on the destruction of the young crickets. They remain quite stationary during five or six days after being hatched, and thus time is allowed for their destruction. The Arabs employ very primitive means; they jump among them, treading and crushing them under foot, beating about in every direction with branches of broom and oleander, and lighting immense fires all over the place with alfa grass, or any dry brushwood that may be available.

But the most practical method is by the use of implements similar to those which were so useful in Cyprus. These are bands of cotton stuff, 20 to 25 mètres in length, on which are sown strips of American wax-cloth. The young crickets climb up the former, but when they arrive at the latter they can find no foothold, and tumble back into ditches prepared for their reception, and along which sheets of zinc are placed to prevent their egress. These screens and ditches are placed end to end for a considerable distance, and the former are fixed in an upright position by stakes. As soon as the ditches are filled, the insects are covered over with earth, and the screens are advanced.

The inhabitants of the desert, however, do not regard these insects with the same dread as do those of more fertile districts; for them they are a precious manna sent by Providence; they collect them with care, dry and salt them, and devour them with as much relish as a Londoner does shrimps at Margate.

§ 12. GEOLOGY, MINERALOGY, HOT SPRINGS, ETC.

GEOLOGY.—The **Crystalline rocks**, including granite, gneiss, and mica-schist, are but slightly developed as regards superficial extent, though they attain a considerable thickness. They seem to be confined to the neighbourhood of the coast, on or near which they are found in small patches, and at distant intervals all the way from Tetuan and Ceuta, in Morocco, to the frontier of the Tunisian territory. There is a patch near Nemours, not far from the west frontier of Algeria, and others at Algiers, the Djurdjura mountains, Djebel Goufi (Cape Bougiaroni), and Djebel Edough, between Philippeville and Bône. The **Palæozoic rocks** also attain a considerable thickness, though with a small superficial development; and as fossils have not yet been discovered in them, their age is not accurately known, but they are thought to belong to the Silurian epoch. They consist for the most part of much altered limestones, associated with schists; in places of argillaceous or arenaceous schists with quartzite. They are found in the neighbourhood of the coast, usually at the spots where the crystalline rocks show themselves.

Upon these palæozoic rocks rest unconformably at certain places a considerable thickness of red conglomerates, coarse sandstones, and arenaceous slates. They are non-fossiliferous, and may be either Devonian or Permian. **Jurassic strata** are only found in scattered patches in the two eastern pro-

vinces of Algeria, but in the province of Oran they are extensively developed. The former seem, from the fossils which their limestones and dolomites contain, to blend together the three divisions into which the lias can usually be separated. In the province of Oran, above these liassic strata, are others nearly 2000 feet thick, which fall into the Kelloway, Oxford clay, and Coral rag divisions of the Middle Oolite. It seems that the Lower and Upper Oolite are not represented, and the next beds are those that belong to

The **Cretaceous formation**, which in the provinces of Constantine and Algiers are so well developed that some geologists believe all the divisions into which the formation is distinguishable in France are to be found here. The Neocomian division, which is chiefly composed of sandstones and marls, with a thickness of more than 1000 feet, is seen at a number of detached points, extending from Tunis to Morocco. The mountainous district near Cherchel and Milianah is composed of these beds, which hereabouts reach the coast. The greater part of the hill of Chenmoua, east of Cherchel, consists of inferior cretaceous rocks.

The middle and upper divisions of the cretaceous formation cover a large extent of surface in Algeria, and in many districts the beds are much inflexed and dislocated. M. Coquand, who has examined the geological features of Constantine, states that he has met with five stages of the lower chalk, seven of the middle chalk, and four of the upper chalk, with their characteristic fossils. The upper divisions are but feebly developed in the Oranese Tell, but in the south of the province it occupies a considerable superficies.

Commencing the Tertiary beds with the Nummulitic division of the Eocene, rocks of that formation have been found at many detached points, but not to extend over a wide surface of the country. In the province of Constantine there are patches in the High Plateaux and in the mountainous region bordering them on the south. A more northerly band of patches is seen passing by the mountains of Babor (between Djidjelly and Bougie), Djurdjura, Bouzegza (the striking hill seen from Algiers in the south-east), Chenmoua (seen from Algiers in the west), and Cape Ténès. In the province of Oran only a few small fragments have been discovered. The beds of the **Miocene** epoch are extensively developed in Algeria. The lowest division is well seen at Tiziouzou (Djurdjura), and on the flanks of the Atlas between Blidah and El-Affroun; also at Milianah and Ténès, all in the province of Algiers. The next stage is susceptible of division into several groups, one of which is the exact equivalent of the faluns of Touraine, abounding in **Ostrœa crassissima**. The cedar forest of Teniet-el-Ahd stands above beds of this division, the Helvetian group of continental geologists. A third stage, which does not contribute to the constitution of the Atlas ranges, but is only found at their feet, is chiefly composed of marls and sandy limestones or molasse. These beds are well developed in the Sahel of Algiers. In this district we find first a coarse sandstone with clypeastus, then a thick deposit of marls, which in places are rich in shells, and at the top a molasse with *Terebratulina ampulla*.

The **Pliocene** epoch is represented in the province of Oran by sandstones with many recent shells, which sometimes attain a thickness of 150 m.

(plateau of Mostaganem, valley of the Chélif, etc.) In the other provinces such beds are as yet unknown.

Beds of the **Quaternary** epoch (applying the term to all deposits posterior to the last Alpine dislocations) cover very large spaces in Algeria, and offer problems which will require much study on the part of the geologist. The lowest division consists of a thick deposit of pebbles surmounted by beds of gravel, above which is an argillaceous deposit. These beds are posterior to the latest basaltic rocks, and they have been subjected to a movement of elevation. The immense extent covered by these deposits in the interior of the country is very remarkable, as well as the height to which they reach on the Plateaux. They appear to be of precisely the same nature as those extending over enormous spaces in the Sahara. Their origin remains an unsolved enigma. One point, however, is clear: they do not belong to a deposit, originally continuous and afterwards dislocated, but they were accumulated by atmospheric agencies in separate basins of greater or less extent. In the coast region the plain of the Metidja and the valley of the Chélif afford examples of these wonderful accumulations of transported materials. The Metidja plain has been bored to the depth of 600 feet without reaching the limit of the quaternary deposits.

In addition to these subaerial deposits there are raised beaches to be seen at intervals all along the coast, from Tunis to the Atlantic border of Morocco, showing that the land has been elevated a few feet in recent times, for the fossils thus brought into view belong to the existing fauna of the Mediterranean.

Finally, there is the earthy matter deposited in the great depressions, called by the Arabs **Sebkas** or **Chotts**. These are hollows, frequently of a great size, which in some cases are filled with water, in others permanently dry. The deposit alluded to is of a more or less argillaceous and very fine material. It is often stratified, the beds being sometimes a few yards in thickness. In it are found shells of terrestrial molluscs of living species.

Though the sedimentary deposits above described constitute the most prominent features of the geology of Algeria, **Eruptive rocks** are not wanting in this country. It is true their mineralogical character is not always easy to determine; but we may admit, in general, that many of those rocks have a great affinity with melaphyrs and basalts, whereas others belong to diorites, dolerites, porphyries, and trachytes.

In the province of Oran basalts are common, particularly between Oran and Tlemçen, but it is in the province of Algiers that eruptive rocks have been most studied. They appear there either like gigantic dikes, disposed on more or less regular lines, directed generally from east to west, or they are scattered about like isolated islands. The first are for the most part represented by a chain of mountains or hills—such are the two eruptive ranges between Milianah and Cherchel—of which the one follows the northern slope of the *Sra Kebira*, and the other (to the north of the first) extends from the chain of *Djebel Souma*, nearly to the small town of *Zurich*. Farther to the north, the shore between Cherchel and the Oued Arbil is more or less chequered by numerous volcanic outbursts, which, without following uninterrupted lines,

follow the direction of the shore, and consequently range equally from east to west. Among those volcanic manifestations must be mentioned a kind of **peperino** which occurs in the neighbourhood of Cherchel, where, on both sides of the *Oued el-Hachem*, the tertiary regularly-stratified deposits present a curious alteration in the structure and the mineralogical composition of the rock ; for not only are these tertiary strata highly indurated, as if they had been exposed to the action of fire, but they include a quantity of little dark-greenish fragments, different from any rock occurring on the surface of the country. It is therefore probable that the agent which converted those tertiary strata into a volcanic conglomerate, reminding us of the *peperino* of Rome and Naples, was of a subterraneous nature, the more so as a dark-greenish rock, very like a diorite, composes the superior part of the mountain Djebel Arujaud, situated to the west of Cherchel, near the mouth of the Oued Masselmun. The *peperino* of Cherchel occurs equally in the plain of Metidja.

The three above-mentioned zones (Sra Kebir, Oued-Arbil, and the shore of Cherchel) constitute the chief linear ranges of volcanic rocks in the province of Algiers ; but, as we have already stated, except those linear (or nearly so) volcanic expansions, the country in question is chequered by numerous volcanic outbursts scattered about promiscuously. Such are the local outbursts which generally mark the site of hot springs so abundant in this country, and among which the *Hammam Melouan* is one of the most remarkable. An important local volcanic outburst is offered by the mountain *Zakkar Gharbi* (to the north-west of Milianah), crossed by a porphyric dike of a whitish colour more than 8 kilomètres in length. It is chiefly composed of felspar, including crystals of quartz, small lamellæ of mica, and some other minerals in less quantities. It may perhaps not be quite without the limits of our subject to remark that the vegetation observed on this large dike consists almost exclusively of the *Cistus ladaniferus*, a fact which offers a curious exemplification of the peculiar connection between the chemical composition of the soil and its vegetable character.

It is highly probable that all the above-mentioned volcanic rocks in the provinces of Oran and Algiers are contemporaneous, or nearly so, and there cannot be any doubt about their age, for they have all protruded through the tertiary deposits of the country, and therefore are of a post-tertiary epoch. One of the numerous instances which prove this statement is offered by the *peperino* of the plain of Metidja, where, on many points, this volcanic conglomerate is covered by the quaternary deposits, which, moreover, frequently include fragments of the volcanic rocks of the country.

It is most likely that these may be discovered in other parts of Algeria ; but in the present state of our knowledge we must limit ourselves to those positively ascertained. At all events, the concentration of volcanic rocks in the province of Algiers, and in the proximity of the town, may account for the frequent earthquakes to which Algiers, Blidah, Djidjelly, etc., are subject.

This rapid sketch cannot be closed without inquiring into the part which the phenomenon of **glaciation** may have played in the geological history of

Algeria—a phenomenon which has given rise to a greater amount of controversy than perhaps any other fact of Natural Philosophy. It is true Algeria has not yet been sufficiently explored to yield a satisfactory answer to this important question; nevertheless, many of its regions have been carefully studied by able geologists, such as MM. Coquand, Ville, and Pomel, from whose observations all traces of the glacial epoch could not have escaped had they existed. It seems, therefore, very probable that Algeria has not been exposed to the glacial period. This fact is of great importance, because it adds another large country to the number of those which do not offer any trace of a geological phasis considered by so many natural philosophers as having invaded the greatest part of our globe—a hypothesis which loses ground as our geological investigations gain in extension. So, for instance, no positive trace of the glacial period has hitherto been ascertained in European Turkey, Greece, in the Caucasus, in the Himalayan mountains, in Thibet, or in China; neither did M. de Tchihatchef discover any in the Altaïen mountains of Siberia, or on any point of the large peninsula of Asia Minor, which during six years he crossed in every direction. Like all those countries, Algeria seems to have escaped the action of the glacial period, *in spite of the proximity of other countries invaded by it*, an exemption which has a striking parallel in Asia Minor; for the northern shores of this peninsula are separated only by a distance of about 500 kilomètres from the southern limit of the erratic blocks in European Russia, which do not go beyond the latitude of 51 degrees, a distance almost equal to that between Land's End and the Pentland Straits. It will easily be admitted that if one of these two extremities of England were now to be buried under a thick permanent crust of ice, such an event would have a great effect upon the opposite extremity, whatever might be the nature of the intermediate space, whether land or water, for in the first case traces of ancient moraines, as well as furrowed and scratched surfaces of rocks, would indicate the former existence and movement of glaciers; and, in the second case, erratic blocks and *débris* would have been transported from one point to the other by floating masses of ice. The absence in Asia Minor of any traces of the intense cold which during the glacial period prevailed through almost the whole of European Russia is particularly striking, when we consider that now, when the large Russian plains are no longer covered with glaciers, but merely exposed to the atmospheric current coming directly from the Arctic region, they exercise a strong influence on the climate of the Black Sea, of the northern shores of Asia Minor, of the Bosphorus and of Constantinople. This refrigerant action manifests itself not only by the depression of the annual, and particularly of the winter temperature, much lower than that of any countries placed under the same latitude and under similar topographical conditions, but also by the curious phenomenon of congelation, of which the Black Sea, the Bosphorus, and even the Dardanelles have offered several instances, for M. de Tchihatchef has shown that this fact has occurred no less than *seventeen* times during the historical period.¹

¹ Vide *Aste Mineure*, vol. ii. (Climatologie), pp. 35-67, by P. de Tchihatchef; and *Le Bosphore et Constantinople*, pp. 268-318, by the same author.

All those extraordinary phenomena receive a new support from Algeria, for the littoral of Africa is separated from Southern France and Italy, where the glacial period has left unmistakable traces, by a distance still smaller than that between Asia Minor and Southern Russia. Therefore the absence in Algeria of any well-ascertained traces of the glacial epoch is a most important contribution to the argument which may be alleged in favour of the statement—that the glacial period, far from possessing a *general* character, is less remarkable for its *extension* than for its *localisation*, and took place not only independently of temperature and geographical position, but rather in a most striking opposition to such conditions, so that the extension of glacial phenomena has been checked or favoured by causes hitherto inaccessible to our knowledge, and at any rate very different from those admitted by the theories of many geologists belonging to the school of glacialists.

MINERALOGY.

During the last thirty years numerous concessions of **Iron, Lead, Copper**, and other minerals have been made, but the working of them has not always been attended with success, principally owing to the want of adequate means of transport. The mineral wealth of Algeria appears to be boundless; **calamine** or **carbonate of zinc**, **cinnabar** or **sulphide of mercury**, various **ores of copper**, and **argentiferous lead ore**, are found in great abundance, especially in the province of Constantine. But the most valuable mineral of Algeria is its iron, which is found, in some places, close to the sea. The quality is exceptionally rich and good; it is nearly devoid of sulphur, arsenic, and phosphorus; the proportion of metal in the ore is sufficient to enable it to pay a heavy freight to Europe, and in much of it there is a large proportion of manganese, which is of great value in the reduction of the metal. Immense deposits of **phosphate of lime** have been discovered in the neighbourhood of Tebessa and elsewhere; this subject has been treated in detail in Consular Report, Ann. Ser., No. 1507, 1895.

Algeria possesses considerable quantities of **Salt**. In *Routes 12 and 21* will be found a description of two remarkable mountains of rock-salt; and there are many salt lakes and marshes, some of them being hundreds of square miles in area, which could be made to furnish almost any quantity. Many different kinds of **marble** are found, some of it of excellent quality, such as the white, gray, red, green, rose-veined, etc. The quarry of so-called **Algerian onyx** at Ain Tekbalet was formerly worked by the Romans, as was that of Ain Smara in the department of Constantine. Many ancient quarries have been found near Kleber, in the province of Oran, some or all of these being the long-lost **Numidian marbles**. They are of a richness and beauty quite unequalled in any other part of the world. **Building-stone** is abundant; also freestone, gritstone, gypsum, potters' and brick clay, and slate.

HOT SPRINGS.*

There are numerous thermal springs in Algeria, but few of them are as yet turned to any account. Those principally used are:—

[*Algeria*]

The **Hamman B'irha**, the Roman *Aquæ Calidæ*, near Bou Medfa, on the railway to Oran. Traces of the ancient Roman town still exist; and there is a large and commodious establishment. Temp. about 115° Fahr.

The **Hamman Melouan**, in the valley of the Harrach, much frequented by the natives, who have implicit belief in the efficacy of the waters. Temp. 103° Fahr.

The **Hamman Meskoutin**, near Guelma. These are the most remarkable of any of the hot springs of Algeria. The waters contain a great deal of carbonate of lime in solution, which, being gradually deposited, has formed a large rock, from the top of which the springs issue. They are the hottest of all the sources in the country, the temperature being 203° Fahr.

The **Hamman at the Portes-de-fer**, containing 22 centigrammes of sulphate of soda per litre of water, and having a temperature of 158° to 170° Fahr., is excellent in cases of cutaneous diseases.

The **Ain M'kebrita**, 50 kil. S.E. of Constantine; which, though not very warm, is rich in sulphur and chloride of sodium.

The **Bain de la Reine**, 3 miles from Oran, where there are bath-houses. The waters, which rise in a grotto, have a temperature of about 125° Fahr. Besides those here mentioned, many other mineral springs, both hot and cold, exist, which are less frequented. (See the various localities indicated.)

EARTHQUAKES.

Algeria is subject to earthquakes, which have occasionally been very severe. One occurred in 1716, and continued with intervals for a whole month. In 1825 Blidah was entirely destroyed by one, and, according to Consul-General Thomas's report, more than 14,000 of the inhabitants perished; and again, in 1867, the same town and several surrounding villages were partially thrown down. The town of Djidjely was also destroyed by the same cause in 1855. A very severe one occurred at M'sila in the end of 1885, and another in the district round Cherchel in January 1891.

§ 13. COLONISATION, AGRICULTURE, FORESTS, ETC.

Colonisation.—The colonisation of Algeria is a splendid work still far from completion. A long extent of seaboard, rich soil, boundless material wealth, a fine climate, magnificent scenery, the most favourable geographical position conceivable,—all these ought to secure for it a brilliant future.

France has indeed done much for it, and the world owes her a debt of gratitude for having converted a country which on the sea-coast was a nest of pirates, and in the interior a chaos of anarchy, into a colony, not yet indeed as prosperous as it ought to be, but still an infant of fair promise, requiring only tranquillity, population, and good government to make it what it once was, the granary of Southern Europe.

Like the conquest of a country, colonisation should proceed inland from the sea. At first on the littoral there were low plains, marshy and hot, the nurseries of malarious fevers. These are now to a great extent drained, and long culture has rendered them comparatively healthy; trees have every-

where been planted, and it may be now said that the plains have been conquered to colonisation, and the higher and more healthy lands are now open to it.

An exception may perhaps be made to a certain extent in the plain of the Chélif. The agricultural produce of a country does not entirely depend on the fertility of its soil ; the hygrometrical condition of its climate is equally important. Thus the plains of the Metidja and Chélif have equally good soil, but in the first, rain is more abundant, and the sea-breezes afford a certain quantity of moisture ; the consequence is that its harvests are generally good, and population can always find the means of increasing. But in the plain of the Chélif rain is more scarce, the air drier, owing to the sea-breezes being shut out by a range of hills along the coast, and good harvests are not obtained more than once in three years.

Evidently the only means of remedying this, and opening out this great plain to colonisation, is by constructing dams or *barrages* to irrigate the land, and by planting trees wherever possible.

This plain contains 500,000 acres of land of the first quality, of which 200,000 are capable of being irrigated. Colonisation is here represented by but few centres of European population, of which the European inhabitants hardly exceed 4000, the natives being scarce in proportion. Nevertheless, a railway and a good road traverse it for a length of 200 kilomètres, and several *barrages* have been constructed. In the present condition of this plain it would be inhumanity to create many villages, the heat of summer there being intense, and the absence of all shade greatly increasing the fatigue of labour ; wherever trees have been planted their influence on the climate has been considerable, and there has been a perceptible decrease of temperature.

From 1833 to 1844 absolutely nothing was done towards colonisation ; between the latter year and 1848 the villages of the Sahel and of the Atlas were laid out, and many of them finished. Marshal Bugeaud conceived the idea of converting his soldiers into colonists ; he gave them lands, supplied them with the mules of his train, and built them the necessary public edifices ; but a year after not one of them remained ; they had sold both land and beasts and had disappeared, none can say where.

After the revolution of 1848 the *Assemblée Nationale* voted with enthusiasm the sum of £1,000,000 sterling for the purpose of establishing agricultural colonies in Algeria, and for the relief of the workmen of Paris thrown out of employment, nearly all of whom were strangers to such work. The number of immigrants who availed themselves of this arrangement was 10,376, and 41 colonies were created, having an area of about 140,000 acres. The expense of these colonies was very considerable, and amounted to about £8000 for every 100 souls.

After the insurrection of 1871 the Government of Algeria decreed the confiscation of the land belonging to all the insurgents, but, unwilling to apply this punishment too rigorously and depopulate the country, a compromise was effected ; the State took possession only of such portions as were necessary for the creation of new villages in the heart of the insurgent dis-

tricts, and allowed the original proprietors to retain a large proportion of their possessions, exception being made to the great leaders of the insurrection, who, as might be expected, possessed some of the finest land in the colony—notably in the Oued es-Sahel, or valley of Bougie, and in the Medjana.

The number of douars whose land was thus sequestrated was 321, namely, 132 in the province of Algiers, and 189 in that of Constantine; of these 154 purchased it back for sums of money, 121 sacrificed a portion of the land itself, and 46 paid partly in money and partly in land. The total amount in money received was 8,637,000 f. and in land 288,968 hectares, while the war contribution exacted from the insurgents was little short of the sum originally demanded, 30 millions of francs.

In 1873 a large number of families from Alsace and Lorraine were induced to emigrate to Algeria through the action of the *Société protectrice des Alsaciens-Lorraines*, presided over by the Comte d'Haussonville. 670 families arriving without means of any kind were provided with concessions of land, houses, seed, and the means of living comfortably till after the first harvest. Others having some small means of their own received liberal assistance to enable them to settle under favourable conditions in the country, and large concessions were given from the sequestrated land to older colonists.

The result from 1871 to 1883 may thus be summarised. The area of land devoted to colonisation is 475,807 hectares, of which 347,268 has been given to individuals and the rest to communes. The value of this land is estimated at 43,267,991 f. The State has expended for the installation of colonists 16,568,507 f. The number of individual concessions is 12,270, and the number of families settled on them is 10,030. Of this number, 3474 having failed to comply with the conditions of their grants, these were revoked and reconceded to 3526 new families. Of the 10,030 families originally provided for, 5837 were still resident on their concessions, 718 had let their land, and 1418 had sold it.

Cereals.—The principal cereals grown are wheat, barley, and rye, but agriculture may still be said to be in its infancy. In England the mean produce of land may be taken at 25 bushels an acre; in France it is about 14; but in Algeria, in spite of the natural richness of the soil, the average yield, under European culture, is only 8 or 9 bushels, while the Arab rarely obtains more than six times the amount of seed corn. The reason of this is that the land has never been deeply ploughed; it is not manured, and little or no care is taken to free it from the noxious weeds which choke the corn and exhaust the soil. In the Tell, the region most favourable for agriculture, there are more than 30 millions of acres, of which not more than 10 or 12 millions are planted with cereals. The total production of the colony in an average year is about 350 millions of bushels. The wheat, and especially the *hard wheat*, is much sought for in Europe for the manufacture of macaroni, vermicelli, etc., on account of the large quantity of gluten which it contains. The barley is the species called *Hordeum hexasticum*, and is principally used as food for cattle. A smaller quantity of oats, maize, and beans is also grown; but the soil and climate of Algeria seem peculiarly suitable for fruits and vegetables, which are produced in perfection. In December and

January the fields are filled with all those which are seen in Paris and London only in spring and summer. Owing to the increasing competition of India and America the cultivation of cereals can hardly prove remunerative in this country, and land has consequently become depreciated, in some places to the amount of 25 per cent.

Fruit and Vegetables.—Among the more important vegetables are peas, beans (of which there are many different kinds), cauliflowers, turnips, parsnips, carrots, gherkins, beetroot, cucumbers, gourds, artichokes, asparagus, mushrooms, pimento (or red pepper), lettuces, onions, and potatoes, which last yield two crops yearly. Among the fruits are apricots, strawberries, plums, melons, water-melons, cherries, bananas, pomegranates, pears, apples, etc. Many of the vegetables are gathered all the year round. Madder, henna (used for dyeing the nails), colza, opium, saffron, balm, aniseed, and many peculiar species of plants are also cultivated.

The fig is found everywhere, but especially in the mountains of Kabylia, up to 3800 feet above the sea; it forms one of the staple articles of food amongst the Kabyles, who eat it in great quantities when fresh, and dry numbers of it for winter use; it is also exported for the distillation of a spirit much in use amongst the Jewish community.

The orange tribe grow admirably, and are most productive in many parts of the colony; the best places for their culture are at the foot and in the gorges of mountain ranges, where the air is fresh and cool, and abundant means of irrigation obtainable; they cannot be grown successfully at a greater elevation than 500 feet above the level of the sea. Many other fruits of an intertropical origin flourish in the same region, such as the banana, the guava, the alligator pear (*Persea gratissima*), the loquat (*Eriobotrya japonica*), and several others.

The date-tree (*Phoenix dactylifera*) is only cultivated in and near the Sahara, of which it has rightly been called the king; without it the entire desert would be uninhabited and uninhabitable. The 33rd parallel of latitude appears to be the limit north of which it will not ripen its fruit save under very exceptional circumstances. It requires not only abundant irrigation, but great solar heat; the Arabs say that it stands with its feet in the water and its head in the fires of heaven. The love of the Arab for this precious tree may well be imagined, growing as it does in the sand, contenting itself with water so saline as to destroy ordinary vegetation, giving a grateful shade when all around is burnt up by the ardent heat of summer, resisting the winds which bend but cannot break its flexible stem, affording a fruit sought for in every part of the world, and not only sufficing for the food of the producer but affording a valuable means of exchange by which he may supply all his other wants.

The male tree of course bears no fruit; it has merely a bunch of flowers enclosed until maturity within a spathe. The females have also bunches of flowers, which, however, cannot become developed into fruit until fecundated by the pollen of the male flower. To ensure this result the Arabs ascend the trees in the month of April, and insert into every female spathe a portion of the pollen of the male flower. The fruit then begins to swell, and forms

long clusters weighing from 20 to 40 lbs., each tree producing from 100 to 200 lbs. in a season. To multiply the date-tree the Arabs do not sow the seed, as they could not then be sure of the sex of the trees; they prefer to plant the suckers from the base of a female tree, whence the name *Phoenix*; these become productive in about eight years, but do not attain full fruition before twenty or twenty-five. The trees are about 45 feet high, and as they are planted very close together they afford a dense shade, in which, however, the air circulates freely, so that all kinds of fruit, vegetables, etc., can be cultivated below them. The trees will live for about 200 years, but they are not worth preserving after a century. When they are no longer valuable for the fruit, the sap is extracted to make a kind of insipid wine; and the heart or cabbage of the tree is also eaten. They are then cut down, and the wood, although very inferior in quality, is here valuable, where no other kind can be procured. The roots are used for fencing and roofing, and the leaves are made into mats, baskets, sacks, and cord.

Like all other species of cultivated plants, the date-tree has numerous varieties. In the oases of the Ziban alone seventy distinct varieties are recognised.

The trees come into flower in spring, in March or April, and the fruit is ripe about October.

Tobacco is cultivated with great success, the produce being extremely good; and the Reports of the Juries of the Exhibitions of 1851 in London, and 1855 in Paris, were both most favourable. Indeed, the tobacco of Algeria is said to be finer and of better quality than even that of America. Flax and hemp also are grown to a considerable extent, and cotton has been tried with success; it was cultivated in the Tell by the Turks before the French conquest. At the London Exhibition of 1851 no fewer than eleven prizes were granted to samples of cotton from Algeria. Still this country is never likely to become a great cotton-producing one; there is not sufficient land capable of irrigation, and labour is so scarce that almost any other kind of culture is more remunerative.

But perhaps the most promising culture in which the colonist can engage is that of the vine. M. Dejeron, who was sent by the French Government to report on the subject, thus states his general impressions regarding it: "In my eyes the vine is a providential plant for Algeria; it prospers everywhere, in the worst land, on the most burning soil. In the three provinces I have not found a spot which is unfit for it; everywhere also, but especially on the littoral, I have tasted wine rich in alcohol, and which would have had precious qualities if only it had been better made. The vine will become the fortune of the country. . . . Algeria possesses in its geological structure, in the rays of its sun, in the currents of its air, in its topographical details, those precious qualities which give to the products of the vine their tone, their colour, their delicacy and limpidity. It can produce an infinite variety of wines, suited to every constitution and to every caprice of taste."

The disaster of France was Algeria's opportunity. The cultivation of the vine in France suffered so much by the ravages of the *Phylloxera* that immense tracts of country, once the richest vineyards in the world, were dug

up and put under cultivation with cereals, which did not yield more than a fraction of their former revenue.

To protect the cultivation of the vine in Algeria from this scourge, a decree was passed on the 24th June 1878 prohibiting the importation of cuttings, vine leaves used as packing, fresh fruit and vegetables, and trees and plants of every description. Potatoes only were allowed to be introduced, after having been thoroughly washed. Nevertheless, all precautions have failed to prevent the importation of the disease; it has been observed in various places, especially at Philippeville; the most active measures are adopted for its detection and eradication when observed.

The prohibitory order above mentioned has been much modified.

During 1892 more than 3 million hectolitres of wine were produced in Algeria, but the French vineyards have been reconstituted with American vines, and the cultivators here complain that the impossibility of obtaining remunerative prices for their wine threatens them with ruin.

Another important production of Algeria is a natural one, Alfa fibre (Arab. *Hulfa*) or Esparto grass, under which name are confounded several species of graminæ, and especially the *Stipa tenacissima*, Linn., or *Macrochloa tenacissima*, Kunth., and the *Lygeum spartum*, Linn. The former is the *Hulfa* of the Arabs, the latter the *Esparto* of the Spaniards. Both are abundant in Algeria, but the first is almost the sole vegetable of the High Plateaux. It is calculated that the area of these High Plateaux is about 27 millions of acres, of which surface not less than 16 millions of acres are covered with *Hulfa*.

It is almost all exported to England for the manufacture of paper, and Mr. Edward Lloyd, who first organised this trade, is undoubtedly one of the greatest benefactors to Algeria. During 1890, 105,282 tons were collected and 64,437 tons were exported to Great Britain. This fibre, however, is being rapidly replaced by wood pulp in the paper manufactories of England.

The fibre made from the leaves of the dwarf palm, called *Crin végétal*, is also coming into great demand in the European markets, especially in Germany. It is used both for the manufacture of paper and for stuffing furniture, but for the latter purpose the principal objection is its strong fetid odour, which hitherto has not been successfully removed.

Flora of Algeria.—The first idea of the traveller in reaching Algiers is the dissimilarity between the vegetation he sees and that which he has left behind. Instead of the familiar hawthorn hedges he finds enclosures surrounded by the agave and prickly pear; ancient olives and masses of lentisk festooned with clematis; fields covered with narcissus, iris, various kinds of ophris, and generally bright with flowers of every hue; shady nooks in which grow the African cyclamen with its marbled leaves; in less cultivated ground dwarf palm, arbutus, tree-heath, and cistus form a *makis* in nowise less beautiful than that for which Corsica is so celebrated; while in the gardens, roses, geraniums, violets, and all manner of cultivated flowers bloom throughout the winter. But soon this idea is weakened; he sees that the vegetation is purely European in its character, and almost every plant he finds is a native of Southern Europe, though growing here with greater luxuriance. The flora

of Algeria consists of about 3000 species, of which not more than 450 are indigenous to the colony, and of this number 100 are peculiar to the Sahara.

Until quite lately there was no good work on the botany of Algeria, easily accessible to the traveller. The monumental works of Desfontaines and Cosson are of course the great standards, and Munby's *Catalogus Plantarum in Algeriâ sponte nascentium* contains a tolerably accurate list, but there was great need of something in the form of a scientific and descriptive catalogue. This has now been supplied by two local botanists, professors in the Ecole de Médecine, whose work¹ will be universally hailed as a most valuable contribution to Algerian literature.

System of Agriculture.—The system of agriculture pursued by the natives differs considerably in different regions; the Kabyles cultivate their land much more intelligently and carefully than the Arabs. The usual agrarian measure amongst the Arabs is the extent which can be ploughed during a season by one plough and two oxen: this varies, according to the nature of the soil, from 25 to 50 acres. The season for ploughing commences immediately after the first rains of autumn, usually in October or November, and continues till February, and even later for some crops if abundant rain has fallen.

When the proprietor does not himself farm his own land, he lets it to a *khamis* (or one-fifth); that is, to a farmer who pays the owner four and retains for his own use one-fifth of the crop. The owner, however, is bound to supply oxen for ploughing, seed corn, and advances of money until harvest.

Other arrangements are common, chiefly amongst Europeans, where the proprietor receives two-thirds or one-half of the crop, according to the amount of aid he renders to the tenant.

In the High Plateaux agriculture is carried on under very different conditions. If the soil has not been thoroughly saturated there, the cultivator hardly obtains the amount of his seed corn; but after a rainy winter, or where irrigation is possible, the whole region is covered with the most exuberant vegetation. One grain produces from 150 to 200 heads of corn, and the cultivator is largely indemnified for the losses of the previous year. A curious botanical curiosity was sent to the Governor-General of Algeria in 1862 from M'sila,—a plant of wheat, produced from a single grain, having 400 ears of corn. The fertility of this district has been celebrated from the earliest times, and Strabo asserts that it often produced two crops a year, and in some places yielded 240 times the amount of seed sown. Pliny confirmed these assertions, and cited the instance of a plant of wheat sent to Nero with 340 ears upon it. The natives construct rude barrages to collect the rain-water and utilise the overflow of the river, and several Artesian wells have been sunk by the French, and everywhere with success.

Forests.—The extent of forest land in Algeria, according to the latest statistics, is as follows:—

¹ " Flore de l'Algérie, ancienne Flore d'Alger transformée, contenant la description de toutes les plantes signalées jusqu'à ce jour comme spontanées en Algérie. Par Battandier et Trabut, Professeurs à l'École de Médecine et de Pharmacie d'Alger."

Departments.	State Forests.	Communal Forests.	Total.
	Hectares.	Hectares.	Hectares.
Algiers . . .	436,780	22,735	459,515
Oran	564,784	15,628	580,412
Constantine .	963,873	41,260	1,005,133
Totals . . .	1,965,437	79,623	2,045,060

The area of state and communal forests consists of the following trees:—

	Hectares.
Aleppo pine	813,665
Maritime pine	536
Ilex	604,954
Cork	277,886
Chêne zeen (<i>Q. mirbeckii</i>)	62,585
Cedar	42,882
Thuya	24,039
Miscellaneous	245,060
Total	<u>2,071,607</u>

There are also about 314,000 hectares of private forest.

The total number of trees of every description is estimated at 12,000,000.

The most valuable timber trees are—

The Cork oak (*Quercus suber*). It is stripped of its bark every eight or ten years in the summer months; but it is allowed to reach the age of fourteen or fifteen years untouched. Incisions are made longitudinally and transversely on the trunk, when the cork can be removed in large squares. This operation is called “démascilage.” The cork obtained the first time is thin and hard, and is chiefly used for the manufacture of lamp-black, for painting. The produce of the second and third cuttings is also inferior, after which the cork is of the best quality. The trees usually furnish fifteen or twenty harvests, and should produce each time an average of 100 to 150 lbs. of cork, although as much as 900 lbs. is sometimes obtained from one tree.

The Chêne zeen (*Quercus mirbeckii*), used as timber for building purposes, railway-sleepers, etc. It affects cool, moist situations, and is found in an extensive zone of the Tell, from La Calle as far as Tlemçen.

The Chêne vert (*Quercus ilex*), also a valuable timber.

The chestnut-leaved oak (*Q. castaneifolia*) occurs only in the mountains, and never descends lower than 3000 feet above the sea.

The sweet acorn oak (*Q. ballota*), a handsome tree, which grows abundantly in poor soil and at all altitudes, and produces a large harvest without labour or expense. The acorn is eaten roasted; the Kabyles also grind it, and make couscous with the flour. This acorn has lately been largely exported to Europe for the adulteration of coffee.

Amongst the Coniferae are the Atlas cedar (*Cedrus libani*, var. *atlantica*),

the principal forests of which are in the Aurès Mountains, near Batna and at Teniet-el-Ahd, the trees there rising sometimes to the height of 80 feet, with a girth of 20 feet. The *Abies* or Pinsapo of Babor. The Aleppo pine (*Pinus halepensis*), producing about £40,000 worth of resin annually. The Thuya or Atlas cypress (*Callitris quadrivalvis*), the trunks of which are almost imperishable, and the roots of which afford one of the richest and most beautiful of ornamental woods. There are two species of juniper, and tamarisks are found on the margins of salt lakes.

There is a very handsome ash (*Fraxinus australis*), indigenous to the Atlas, and a pistachio (*P. atlantica*) peculiar to it.

The olive is only grown to perfection in Kabylia, commencing at an elevation of about 2600 feet above the sea; the trees as a rule receive very little care, and, as a consequence, they do not yield an abundant harvest oftener than once in two years. The fruit is small, but the oil is of an excellent quality. The tree grows, and even bears abundantly, in regions lower down; but there it is apt to suffer from the heats of summer, and the fruit is liable to be injured by the attacks of an insect, the *Dacus oleæ*, which cause it to fall before maturity. It has been calculated that there is in Algeria sufficient land, admirably adapted for its cultivation, to contain 100 millions of trees, which would yield 100 million litres of oil, worth annually 800 millions of francs, which result could be obtained in about twenty-five years.

The forests throughout Algeria, and to a much greater degree in Tunis, have been greatly injured by periodical conflagrations caused by the Arabs, in some cases out of motives of enmity towards the French, in others for the sake of obtaining better pasturage for their flocks; the most destructive were in 1865, during the insurrection of 1871, in the month of April 1873, and in the summer of 1877. The surface more or less damaged by fire is, on an average of the last five years, about 28,000 hectares per annum.

The question of the *reboisement* of Algeria is therefore one of the most important matters that can engage the attention of the State. To effect this by planting the trees indigenous to the country would certainly be a long and costly operation; but with the Australian species, remarkable for their rapid growth, the question becomes much more easy of solution. Thanks to the indefatigable perseverance of three men, Messrs. Rammell, Cordier, and Trottier, veritable benefactors to this country, Algeria has been endowed with a precious boon, the introduction of the eucalyptus, a tree which, by reason of its rapid growth, will undoubtedly exercise a powerful influence in changing the climate of the colony. Many species have been tried, but the most generally successful are the red-gum of Australia (*Eucalyptus resinifera*), the Tasmanian blue-gum (*E. globulus*), and the *E. Colossea*.

It is impossible to foresee to what size these trees may attain in Africa, but in Australia they sometimes reach a height of 300 feet, and are hardly less in circumference than the giant Wellingtonias of California. Some of the Australian acacias and casuarinas are hardly less valuable than the eucalyptus, but none of them can be cultivated with success at a greater altitude than 1500 feet above the sea.

§ 14. ARCHÆOLOGY.

To the student of history, the archæologist, and the philologist, Algeria and Tunis offer a vast field for exploration and research, and, what is so difficult to find elsewhere, one whose riches are far from being exhausted.

All over the former country, but especially in the province of Constantine, are scattered prehistoric monuments; assemblages of rude stones, dolmens, cromlechs, excavations in the rock; in fact, almost every known variety of Mégalithic remains, and some quite peculiar to the country.

Some of these are close to Algiers, near Guyotville; others at Djelfa.

In the province of Constantine are the monuments of Ras-el-Akba, between Guelma and Constantine; of Bou-Merzouk; of Roknia, near Hammam Meskoutin; at the foot of the Beni-Saleh mountains in the Oued Besbes; south of La Calle; at Foun-el-Mabrek and N'guib, near Bône; at Gastel, between Souk-Ahras and Tebessa; near M'daourouch; and all over the country of the Nememcha and the Aurès Mountains. A manufactory of flint instruments was found near Negrin at the ruins of Besseriani (*Ad majores*).

Leaving this prehistoric period, we find abundant traces of Phœnician occupation, if not in actual ruins, at least in the names of places, especially seaports, showing that the Phœnicians created commercial establishments all along the north coast of Africa, wherever a creek promised shelter for their frail but adventurous barques. The Carthaginians, who followed in their steps, founded cities farther inland, and several Punic inscriptions have been found at a considerable distance from the sea.

Then followed the long and bloody wars which terminated in the ruin of Carthage and the occupation of her colonies by the Romans, about the middle of the second century, B.C.

These were at first left under the government of native princes, such as Masinissa, Bocchus, and Juba, the first and last of whom erected those gigantic sepulchres, the Medrassen and the Tombeau de la Chrétienne, near Batna and Algiers. Subsequently, about A.D. 40, the country was reduced to the condition of a Roman province.

Magnificent ruins remain to attest the glory of this epoch: temples dedicated to every deity in heathen mythology, theatres, triumphal arches, architectural details in the purest style of art, mosaics of rich colour and varied design, baths, monumental fountains, and hydraulic works, all testifying to the vast extent and solidity of the Roman sway in Africa.

The early Christian epoch is equally well represented by basilicas transformed into churches, inscriptions containing the name of Christ, Christian symbols and monograms, the graves of bishops, saints and martyrs, and above all the scenes consecrated by the life, ministry, and death of Saint Augustine, and his no less saintly mother, Monica—of that friend of his youth and of his old age, Alypius of Tagaste; of his no less beloved friend Possidius, who subsequently became his biographer. Here also may be studied with advantage the scenes of those frantic theological wars which caused the downfall of the African Church.

The next epoch was more marked by destruction than construction.

Count Boniface, Governor of Africa in the fourth century, having conceived the idea of rendering himself independent of Rome, called in the Vandals to assist him ; they came, and soon made themselves masters of the country. At first they well sustained their destructive reputation, but subsequently they so lost their vigorous and warlike habits, that Belisarius, at the head of a small phalanx of well-disciplined soldiers, had little difficulty in destroying them, and annexing Africa to the Eastern empire. The Byzantines under Solomon, the lieutenant and successor of Belisarius, commenced to restore the most important military buildings throughout the country, such as those at Tebessa, M'daourouch, and elsewhere, still in good preservation, and unmistakably renewed with older Roman materials.

When intestine feuds and disputed successions had wrought the ruin of the Eastern empire, Africa was thrown into such a state of confusion as to pave the way for the most marvellous conquest that the world's history contains.

A mere handful of Arab soldiers under Okba bin Nafa, with the sword in one hand and the Koran in the other, overran and conquered North Africa, from the Nile to Tangier. Many vicissitudes took place, and Okba himself was killed ere this conquest was consolidated, but eventually all the native races adopted the new religion, and became more or less assimilated to the Arabs. Many of them no doubt passed over into Spain with Tarik, whose name lives imperishably in GIBRALTAR (the mountain of Tarik), although he himself shared even a worse fate than his predecessor, Belisarius.

The epoch of the first Mohammedan invasion is well marked by the tomb of Okba, near Biskra, which still bears what is probably the oldest Mohammedan inscription in Africa, if not in the world—*This is the tomb of Okba bin Nafa : may God have mercy upon him !*

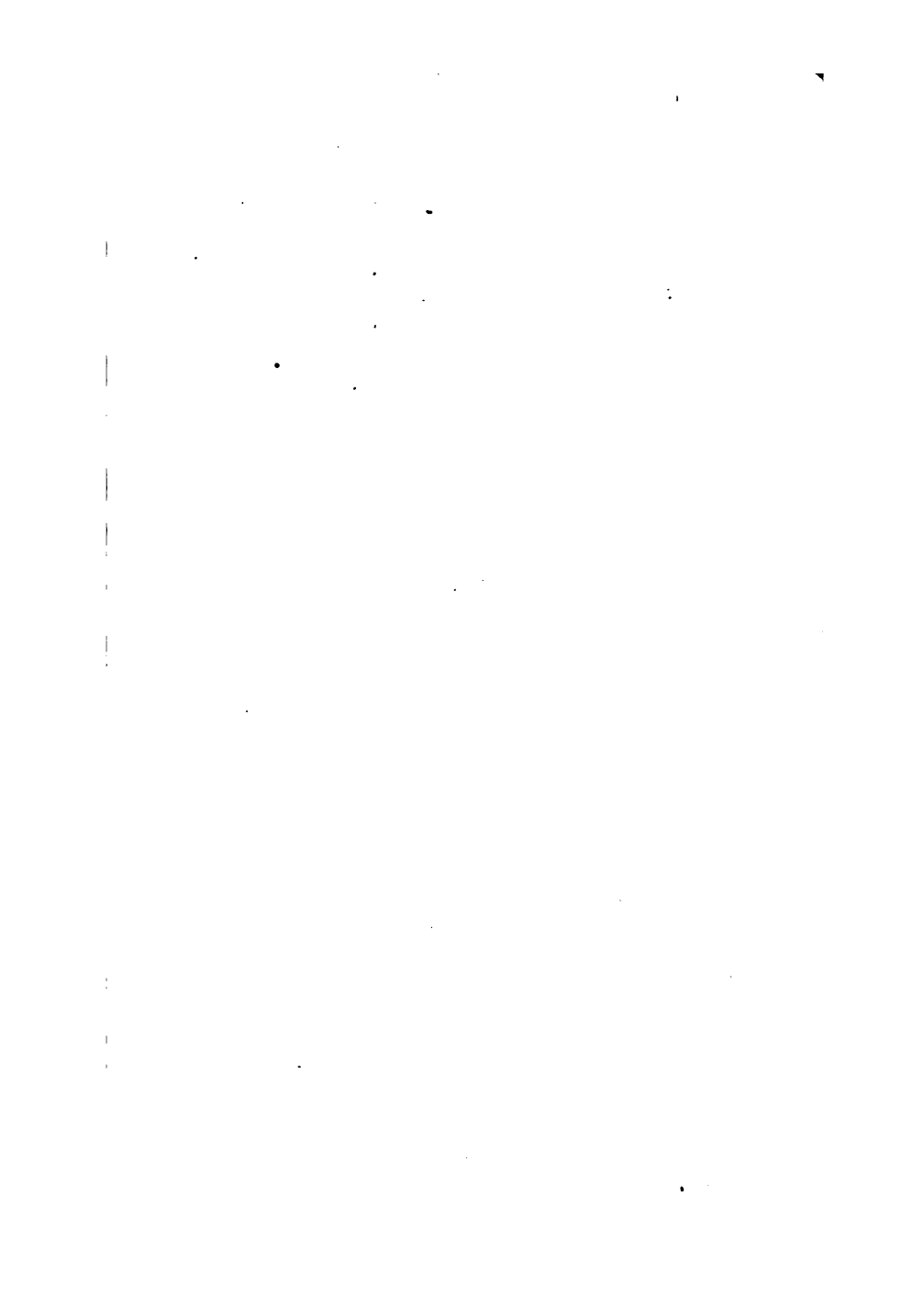
The descendants of these conquerors did great things in the land of their adoption : they founded important kingdoms, of which that of Tlemçen is pre-eminent, both from its past history and the splendour of its existing monuments. They encouraged art, science, and literature, and attained a degree of splendour hardly inferior to that of the Romans.

This progressing civilisation, however, was checked by the invasion of a horde of savage nomads from Arabia, who devastated the country and forced the aboriginal inhabitants to take refuge in their mountain fastnesses, and even to found new colonies beyond the great desert, such as Timbuctoo and Senegal.

At the end of the fifteenth century the Moors expelled from Spain found a shelter in Algeria, where they were speedily followed by their conquerors. These were not always victorious, but they succeeded in forming a few colonies on the coast, the ruins of which exist in great abundance at Oran, Bougie, and even at Algiers.

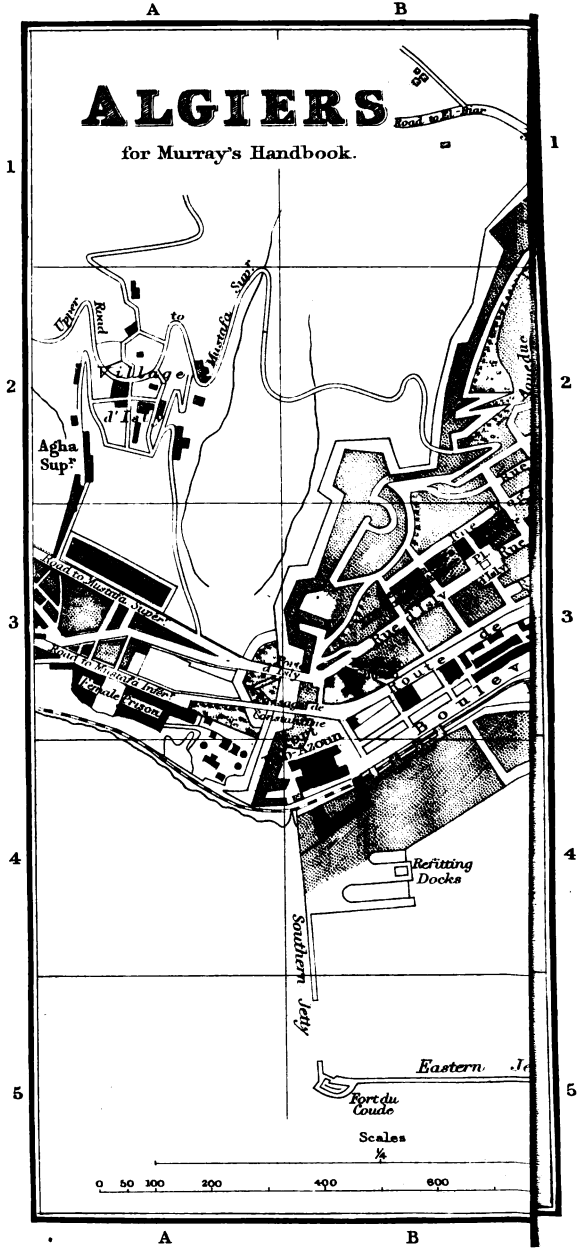
We need not here dwell on the Turkish period, which has been described elsewhere, and which has hardly yet passed into the realms of archæology, but there is much, especially in its domestic architecture, to delight and interest the tourist.

We have said sufficient to show that there are few countries offering a wider field of study to the archæologist, or of instruction to the general traveller, than Algeria and Tunis.



ALGIERS

for Murray's Handbook.



SECTION II.

ALGERIA.

CITY OF ALGIERS.

FORTIFIED place of the first class, seat of the Government-General, of the General commanding the 19th Corps d'Armée, and of the various other high civil and military authorities of the colony. Residence of a Préfet and of Admiral commanding the Marine in Algeria, an Archbishop, and of the various Consuls-General and Consuls of foreign powers.

Court of Appeal, Council of Mohammedan Law, Tribunal of First Instance, two Justices of the Peace, Chamber and Tribunal of Commerce.

Population of the Province :—

French	118,527
Jews	14,948
Mohammedans	1,259,715
Foreigners	65,778
Total	1,458,968

Population of the city of Algiers, including the suburb of *Bab-el-Oued* and the *Faubourg d'Isly*, but excluding the *Village d'Isly*, *El-Biar*, *Bou-Zarea*, *Mustapha*, and *St. Eugène* :—

French	38,041
Jews	7578
Europeans of foreign origin	14,678
Mohammedans	21,465
Total	81,767

El-Biar :—

French	748
Jews	86
Foreigners	1822
Mohammedans	827
Total	2483

Bou-Zarea :—

French	312
Jews . . . . .	..
Foreigners	647
Mohammedans	522
Total	1481

Mustapha and the Village d'Isly :—

French	14,276
Jews	694
Foreigners	7180
Mohammedans	1320
Total	23,470

St. Eugène :—

French	1197
Jews	619
Foreigners	1048
Mohammedans	547
Total	3411

ALGIERS, the ancient *Icosium*, is situated on the western shore of the bay of the same name, 500 m. S. of Marseilles. The town, which is triangular in form, is built on a slope of the *Sahel*, the name given to a chain of hills running along the coast for a considerable distance towards the W. The view, when approaching it from the sea, is most beautiful. It appears from a distance like a succession of dazzling white steps or terraces rising from the water, which, contrasting with the bright green background of the *Sahel*, explains the origin of the Arab comparison of Algiers to a diamond set in an emerald frame.

The shores of the bright blue bay

are dotted here and there with white villages, French villas, and Moorish palaces, appearing in the midst of the richest and most luxuriant verdure, some placed high up on the slopes of the hills, and others standing on the water's edge. Beyond is the verdant plain of the Metidja, stretching away in the distance to the foot of the Atlas range, whose summits form a magnificent background to the whole picture, which will bear comparison with any in Europe. The writer always maintains that the finest view in the Mediterranean is from the Greek theatre of Taormina, and the next finest is from his own windows at El-Biar.

Algiers is divided into two distinct parts, the modern French town and the ancient city of the Deys.

The **Modern Town** consists of regular streets and squares, fine public buildings, and modern hotels, and is well lighted with gas. The *Place du Gouvernement* is a large square, in which the principal streets, *Rue Bab-Azoun* and *Rue Bab-el-Oued*, join, planted on three sides with a double row of plane-trees. In front of the *Hôtel de la Régence* is a group of palm and orange trees, and a fine clump of bamboos, surrounding a fountain. Towards the eastern side is a bronze equestrian statue of the Duke of Orleans by Marochetti. It was cast out of the cannon taken at the conquest of Algiers. The bas-reliefs on the pedestal represent on the N. the taking of the citadel of Antwerp; and on the S. the passage of the Col de Mouzaïa. This Square is the fashionable resort for evening promenade, when it is crowded with loungers of every grade and race. A military band performs here occasionally.

The *Place Bresson*, opening like the preceding on to the *Boulevard de la République*, has a pleasant garden in the centre. The *Place Bab-el-Oued*, or *Place d'Armes*, is a triangular space near the shore, adjoining the Arsenal. This was the site of the ancient Moorish cemetery; the N. side was reserved for the interment of the pashas, and in the middle was the fort

“des vingt-quatre heures,” rendered celebrated as the place of martyrdom of Geronimo (see p. 99). This was also the ordinary place of execution, both under the Turkish Government and for the first years which followed the conquest. On one side of this place is the *Jardin Marengo*, which commands a fine view. The other principal squares of the French town are the *Place Mahon*, adjoining the *Place du Gouvernement*; the *Place de Chartres*, used as a market-place; the *Place de la Lyre*, in which is a covered market; the *Place d'Isly*, in the centre of which stands a bronze statue of Marshal Bugeaud, by M. Dumont; and the *Places Randon* and *Malakhoff*. The *Rue Bab-el-Oued* (River Gate), and *Rue Bab-Azoun* (Gate of Grief), both leading from the *Place du Gouvernement*, are the two most important streets of the city, and contain the best shops. Among the other principal streets of this quarter are the *Rues de la Lyre, de Chartres, Juba, de la Marine, and d'Isly*, some of which are arcaded on both sides—a great advantage in this climate, as the pedestrian is thereby enabled to reach any part of the town without being much exposed to the sun in summer or to the rain in winter. The *Boulevard de la République* is built on a series of arches at the head of the cliff, and extends all along the front of the town. On one side it is bordered by handsome buildings, while a wide promenade runs along the other, overlooking the bay, harbour, and shipping. The *Quay* and *Railway Station* are about 40 feet below, and are reached by two inclined roads leading from the centre of the *Boulevard*. This work was constructed by Sir Morton Peto, to whom the town transferred the concession for ninety-nine years, which had been granted to it by the Imperial decree of 1860. The first stone was laid by the Emperor on the 17th September 1860, and the work was completed in 1866, at a cost of about £300,000. It is still the property of an English company. It is composed of two tiers of vaults, forming about 350 warehouses and dwelling-houses, the whole occupying an area

of 11 acres, and extending over a frontage of 3700 feet.

The **Old Town**, inhabited chiefly by Arabs and Jews, lies on the steep hill rising behind the Rues Bab-Azoun and Bab-el-Oued, and is the very opposite of the French town already described. At the apex of the triangular-shaped mass of white houses stands the *Kasba*, or Citadel, about 400 feet above the shore.

The **Streets** are very narrow, tortuous, and irregular, often ending in a *cul-de-sac*, and are so steep as to be inaccessible for carriages. They are cool and shady, owing to their extreme narrowness. The longest of them, the Rue de la Kasba, is ascended by 497 steps. These streets are joined by many alleys just wide enough to pass through, and the whole labyrinth is terribly confusing to the stranger; many of the Arab names have been retained, but so travestied as hardly to be recognisable; thus *El-Akhdar* (the Green) becomes *Loador*; *Souk-el-Jamäa* (Market of the Mosque) is changed into *Soggemah*, etc.

The **Moorish Houses** are perfectly symbolical of the private life of the occupants: everything like external decoration is studiously avoided, while the interior is picturesque and elegant. The outer door usually gives entrance to a vestibule, or *skiffa*, on each side of which is a stone bench divided off like stalls by marble or stone columns, supporting the graceful flat arch peculiar to Algiers. Here it is that the master receives his male friends. Beyond this is the *oust*, or open court, the *impluvium* of the Romans, and the *patio* of the Spaniards, generally paved with marble, tiles, or bricks, having an arcade all round, formed by the pillars and the horseshoe arches which support the upper gallery. The pavement of the court enclosed by the arcade is usually sunk a few inches, in order to carry off the rain-water. In this central court the great domestic festivities, such as marriage, circumcision, etc., are held. The rooms around

it are more or less of a public character; at least they are not used as dwellings by the family; they are usually kitchens, storerooms, baths, etc. The more private apartments are all above, leading off from the upper gallery, which is similar to the lower one, but having the pillars joined by an elegant wooden balustrade, just high enough to lean on. The rooms have generally large folding-doors reaching from the floor to the ceiling, with a smaller aperture in each leaf, which may be used when it is too cold to keep the whole open. The interiors are white-washed, and have generally a dado of tiles 3 or 4 feet high along the walls. The ceilings are sometimes handsomely sculptured, but more generally they exhibit the naked rafters of thuya or kharoob wood, pine, or cedar. It was the small scantling of this, in times when the communication with other countries was less easy than it is at present, that regulated the width of Moorish rooms, seldom more than 12 feet.

One of the principal features of Moorish houses in town, rising as they do one above the other, is the flat terraced roofs, from which a magnificent view is obtained of the city, the harbour and shipping, and the distant mountains. Under the Turkish Government these were reserved for the women alone, who used to visit each other by climbing over the parapets which divided the houses. No Christian male (the consuls excepted) was ever permitted to go on his own terrace during daylight.

Dr. Shaw, consular chaplain at Algiers about 1720, and whose travels and researches in Barbary are deservedly esteemed for their accuracy and fidelity, illustrates many passages of Scripture by a reference to Moorish architecture. For instance, *the middle of the house* (Luke v. 19), where our Saviour was in the habit of giving instruction to His disciples, was no doubt the hollow Moorish court or *oust* (literally, waist, middle). This in summer was covered over with a curtain running on ropes, to which the Psalmist may have alluded in speaking of

spreading out the heavens like a curtain. The prophet Jeremiah exactly describes Algerian houses when he says that they were *ceiled with cedar and painted with vermilion.* Any one who has seen a Moorish court can understand the allusion to Samson having pulled down the pillars in the Temple of Dagon, while *three thousand persons were on the roof to see him make sport.*

Some of the Moorish houses best worthy of a visit in town are the palaces of the Governor-General and Archbishop, and the Library in the Rue de l'Etat-Major; the Government offices near the Prefecture, formerly the British Consulate; and in the country, the Governor-General's summer palace; the Château d'Hydra, belonging to Mr. Eyre Ledgard, in which there is a priceless collection of ancient tiles; and the magnificent property of Mr. Macleay at El-Biar.

The **Shops** in the native quarter are merely recesses or small chambers in the walls of the houses, and in them is carried on the process of manufacturing some of the articles which are exposed for sale in the shops of the French town below. Here may be seen the embroiderer at work with his gold and silver thread, the shoemaker with kid slippers of every colour and variety, the pedagogue with his school of young Moors, the worker in gold and silver, the barber shaving Moorish heads or chins; and the cafés where the natives sit cross-legged drinking coffee, and while away their time in smoking and playing draughts. Indeed, a walk through the old town is of greater interest to the stranger than any of the sights of modern Algiers. But perhaps what most strikes the traveller from Europe on first walking through the city is the variety and picturesqueness of **Costumes** (see also *Introd.* pp. 8, 10, 11) he meets in the streets. French soldiers and officers, Zouaves and Turcos, with their smart uniforms; the Jew, with dark-coloured turban, jacket and sash, blue stockings and shoes; the Moor, in smartly embroidered jacket, full short trousers, and white stockings; bare-legged

Arabs, wrapped in their white burnous; Mozabites, with their coats of many colours; Negroes from the Soudan; Spaniards and Maltese, all jostle one another in the crowded streets; while Moorish women, dressed in white, with full trousers, slippers, and their faces covered to the eyes, mingle with ladies in fashionable modern toilets, and with Jewesses whose jaws are bound with a muslin handkerchief, and whose straight silk robes reach from the neck to the slipped feet.

CHURCHES.

Church of England.—The Church of the Holy Trinity, at the Port d'Isly, was erected in 1870 by subscription of the winter visitors, for whose use it is intended. It was consecrated by the Bishop (Harris) of Gibraltar, on the 1st January 1871. The patronage is vested in the Bishop of Gibraltar.

There is no endowment whatever, the church and chaplaincy being entirely dependent on voluntary offerings. The offertories as a rule go to the support of the church, but on certain occasions, of which notice is given, they are applied to other purposes; one-tenth of the ordinary offertories is devoted to the Consular poor fund. One-half of the seats are free; the remainder are appropriated at a charge of £1 per sitting for the season. The building, though not very attractive outside, is one of the most interesting of its kind out of England.

A dado or podium has been erected all round the church, with a more elaborate reredos behind the altar, composed of alternate slabs of different kinds of marbles and breccias, framed in bands of *giallo antico* and *breccia dorata*, surmounted by smaller tablets of rose-coloured marble. In the nave and baptistery these contain memorial inscriptions. The following are some of the historical tablets:—

The first is in memory of John Tipton, Consul here in 1580, the first of British birth known to history.

1584. Lawrence, Master of Oliphant, the Master of Morton, and other banished Scottish gentlemen, enslaved

at Algiers, whence they were probably never released.

1620. Sir Robert Mansel, Vice-Admiral of England, sent by James I. against Algiers, in command of the first English Fleet that had entered the Mediterranean since the Crusades.

1631. Two Algerine pirate vessels landed in Ireland, sacked Baltimore, and carried off its inhabitants to slavery in Algiers.

1639. William Okeley, taken prisoner by pirates. He and six other Englishmen, after much suffering, escaped to Majorca in a *canvas* boat.

1644. Edmund Casson, Envoy from the Parliament to Algiers, effected the liberation of many hundred British captives. He died here in 1655.

"January 5, 1644. Gyles Parke, son of John of Holkar and Elizabeth Gordon, daughter of Lord Viscount Kentmeere, married in Algear, by Mr. Spratte, Minister.

"October 21, 1645. Elizabeth, daughter of the said Gyles Parke, baptized in Algier, in Barbary."

The last two are extracts from the parish register of Cartmel, in Lancashire. They confirm an interesting historical episode, which will presently be mentioned. It has been found impossible to identify the "Lord Kentmeere" therein mentioned; but there was a Viscount Kenmure, whose family name was Gordon.

1654. Robert Blake, after his great victory at Tunis, effected the liberation of all Christian slaves on the Barbary coast.

1660. Murrrough, Earl of Inchiquin, Viceroy of Catalonia, while exiled during the Commonwealth, afterwards Governor of Tangier, and his son Lord O'Brien were taken by corsairs near the Tagus, and sold into captivity at Algiers.

1670. Admiral Sir Edward Spragg destroyed the Algerine fleet at Bougie, and released a number of Christian slaves.

1723. Thomas Betton, member of the Ironmongers' Company, probably himself a captive, left half of his large fortune for the redemption of slaves in Barbary.

1800. Ida, daughter of Admiral Ulric, Consul-General of Denmark, born 1800, married Consul-General M'Donnell. The dramatic story of her escape, disguised as a midshipman, with her child, concealed in a basket of vegetables, before the bombardment in 1816, is told in Lord Exmouth's Despatch. She subsequently married the Duc de Talleyrand-Perigord, and died at Florence, October 6, 1880.

Many other historical events are recorded; then follow a series of tablets commemorating such of our countrymen as have died here since the French occupation.

The walls on the north, south, and east sides of the nave, above this podium, are entirely covered with rich marbles, so arranged as to be available for memorial inscriptions. Behind the pulpit on the east side is one which records the good deeds of the Rev. Devereux Spratt. After the great Irish Rebellion of 1640, when returning to England with 120 of his countrymen, the vessel in which they had embarked was captured, within sight of the shores of Ireland, by an Algerine pirate, and all were sold into slavery here. Subsequently, when his freedom was purchased, he refused to avail himself of it, considering that he might be more serviceable to his country by continuing to endure affliction with the people of God than by enjoying liberty at home. A curious confirmation of this story exists in the parish register of Cartmel before noticed; two people, probably captives, were united, and their infant baptized, by the good Devereux Spratt.

Alongside of it is another in memory of the learned Dr. Shaw, Consular Chaplain in Algiers from 1719 to 1731, and subsequently Regius Professor of Greek at Oxford. A third, above these, commemorates the last visit to Algiers of a most faithful servant of Christ, Edward Steer, Bishop of Zanzibar. Close to them, on the north wall, is another in honour of Mr. William Shaler, Consul-General of the United States, who during all the troublous times preceding and subsequent to Lord Exmouth's operations, when our

Consul was imprisoned and in chains, and when he and his family were subsequently expelled by the Dey, rendered most eminent services to them and to the British nation.

The bay in which the door is situated has been decorated in memory of Mr. Edward Lloyd of Salisbury Square, London, and Sittingbourne, Kent, who was known and respected in England as a leading journalist, father of the cheap press, but in this country as one of its greatest benefactors. He was the first to show the value of Alfa fibre for the manufacture of paper, and to start a branch of industry which is now one of the most important in Algeria.

All the windows, eighteen in number, have been filled in with stained glass, generally with memorial brasses attached, to commemorate historical personages or private individuals. The large circular window at the west end is in memory of the English who perished in captivity during the time of the Deys. It represents the deliverance of St. Peter from prison by the Angel, and bears the inscription: "Lord, show Thy pity on all prisoners and captives." One in the nave is in honour of Bruce, the African traveller, Consul-General here from 1762 to 1765. Another commemorates the gallant exploit of Lord Exmouth in 1816, who by his great victory liberated 3000 Christian captives, and for ever abolished slavery in the Barbary States. That next to it is devoted to his brave companion-in-arms, the Dutch Admiral Van Capellan; the cost of this was defrayed partly by his daughter, and partly by the Princes of Holland. Next to it is one in memory of Mademoiselle Tinne, granddaughter of Admiral Van Capellan, murdered by the Touaregs near Tripoli; and so on.

The decoration of the east end is particularly beautiful; the whole of the walls and the reveals of the windows in the apse and choir have been covered with marble mosaics, executed by Mr. Burke, the eminent decorator of the Guards' Memorial Chapel, Chester Cathedral, Eaton Hall, etc. This was our local celebration of her Majesty's

Jubilee. Our American friends cooperated heartily in the work, and two identical tablets have been erected in the nave. One records the fact that the decoration of the church was completed on the occasion of the Queen's Jubilee: "In humble gratitude to Almighty God for His preservation of her to her faithful subjects, during a long and glorious reign." The other commemorates an illustrious citizen of the United States, Commodore Decatur, and ends with a paragraph from the pen of Bishop Potter of New York, which has profoundly touched every English heart:—

"This tablet is erected, June 20, 1867, by citizens of the United States, grateful for the privilege of associating this commemoration of their countryman with the Jubilee of that illustrious Sovereign Lady, Queen Victoria, who has made the name of England dear to children and to children's children throughout all lands."

The west end of the church is filled in with five mosaic panels. Beyond this is the baptistery, decorated with mosaics to commemorate another member of our society who was never weary in well-doing, Sir Peter Coats of Paisley. Never was text more appropriate than that engraved on his monument: "The righteous are had in everlasting remembrance."

There are several tablets in the porch, one of which contains a record of all the Consuls-General, commencing with the name of John Tipton, in 1580, and terminating with that of Henry Adrian Churchill, C.B., 1863 to 1867.

In everything which concerns the church no distinction whatever is made between English and Americans; these are too closely allied by descent and religion to form anything, out of their respective countries, but one common nation.

The idea of making the church a sort of National Walhalla will commend itself to most people, and the relatives of such as may die here will be glad of the opportunity of commemorating their departed friends in a place where

the record will be read during all future time.

There is a **Scotch Presbyterian** church on the road between Algiers and Mustapha Supérieur, erected entirely at the expense of Sir Peter Coats.

The **Cathedral of St. Philippe** (*Roman Catholic*), built on the site of the Mosque of Hassan, named after the Pasha who built it in 1791, is situated in the Place Malakhoff, next to the Governor-General's palace. The Archbishopric was created in 1867. The exterior of the cathedral is quite modern, and the colours are crude and unpleasing; it is a rather unsuccessful attempt to combine Moorish with Christian architecture. The principal entrance, which is reached by a flight of twenty-three steps, is ornamented with a portico, supported by four black-veined marble columns. The roof of the nave is of Moorish plaster work, and rests on a series of arcades, supported by white marble columns, several of which belonged to the ancient Mosque. Some of the modern Moorish work is good; the pulpit is the *mimbar* of the original mosque spoilt by French millinery. The choir is ornamented with four large gray marble columns on bases of porphyry. There are some tolerable stained-glass windows, and several separate chapels. In that to the right on entering is the white marble tomb containing the bones of St. Geronimo. His history and the account of his martyrdom are given by Haedo, a Spanish Benedictine who published a topography of Algeria in 1612. This work was carefully studied by the late M. Berbrugger, curator of the library, who drew public attention to the story, in the vague hope that the body might one day be found. It is as follows:— During an expedition made by the Spanish garrison of Oran in 1540, a young Arab boy was taken prisoner and baptized under the name of Geronimo. When about eight years old he again fell into the hands of his relations, with whom he lived as a Mohammedan till the age of twenty-five years, when he

returned to Oran of his own accord, with the intention of living thenceforth in the religion of Christ. In May 1569 he accompanied a party of Spaniards who embarked in a small boat to make a *razzia* on the Arabs in the vicinity. The expedition was chased by a Moorish corsair, and all the members taken prisoners and carried to Algiers. Every effort was made to induce Geronimo to renounce Christianity, but as he persisted in remaining steadfast in the faith, he was condemned to death, and sentenced to be thrown alive into a mould in which a block of *béton* was about to be made. *His feet and hands were tied with cords*, the cruel sentence was carried out, and the block of concrete containing his body was built into an angle of the fort, "des vingt-quatre heures," then in course of construction. Haedo carefully recorded the exact spot, and added, "We hope that God's grace may one day extricate Geronimo from this place, and reunite his body with those of many other holy martyrs of Christ, whose blood and happy deaths have consecrated this country."

In 1853 it was found necessary to destroy this fort, and on the 27th of December, in the very spot specified by Haedo, the skeleton of Geronimo was found enclosed in a block of *béton*. The bones were carefully removed, and interred with great pomp in the cathedral. Liquid plaster of Paris was run into the mould left by his body, and a perfect model of it obtained, showing not only his features but the cords which bound him, and even the texture of his clothing. This interesting cast of the dead martyr may be seen in the Government Museum.

Nôtre - Dame - des - Victoires, Babel-Oued, formerly a mosque, built in the 17th century by Ali Bitchenin, a Christian slave converted to Mohammedanism.

Sainte-Croix, formerly the mosque called *Jamâa el-Kasba Berrani*, stands facing the Kasba in the street of the same name.

St. Augustin.—Built in 1878 in the Rue de Constantine.

The **Church of the Jesuits**, in the Rue des Consuls.

The **French Protestant Temple**, in the Rue de Chartres.

The **Synagogue**, in the Rue Caton.

Nôtre Dame d'Afrique. See *post*.

MOSQUES.

It is said that there were in Algiers before the French conquest more than a hundred mosques; a great number of which were, however, merely "koubbas" or tombs of "marabouts," or Arab saints. These last generally consist of a small isolated domed structure containing the tomb, which is protected by a wooden grating. These koubbas are used as places of prayer, especially in the country, where no real mosques exist. They are sometimes incorrectly given the name of marabouts by the French. The word *marabet* really means one who is bound or devoted to religion, and ought to be applied to the man and not to the tomb.

There are now but four mosques regularly used for Mohammedan worship in Algiers. These are all accessible to Europeans, but visitors ought to remove their shoes at the entrance, out of deference to the feelings of those for whose use they are intended, and who prostrate themselves on the floor during prayer. The principal is

The **Grand Mosque**, or *Jamâa el-Kebir*, in the Rue de la Marine, the most ancient in Algeria, said to have been founded in the 11th century. An inscription on the *minbar* or pulpit in Cufic characters proves the fact of the building having existed in A.D. 1018, while a marble slab in one of the walls records that the minaret was built by Abou Tachfin, King of Tlemçen, in 1324. The interior consists of a square whitewashed hall, divided into aisles by columns, united by semicircular

Moorish arches. These columns are wrapped round to a height of 5 or 6 feet with matting, which is likewise spread over the floor. At one end is the *mihrab*, a niche in the wall, which serves to indicate the direction in which Mecca lies. The general appearance is bare, the only decoration being the suspended lamps, and the *minbar* or pulpit for the Imam. One part of the mosque serves as a court of justice, where ordinary cases are heard by the Cadi. The exterior presents, towards the Rue de la Marine, a row of white marble columns supporting an arcade, in the centre of which, before the entrance, stands a marble fountain. The worshippers in this mosque are of the Maleki rite, the only one represented in Algiers prior to the conquest by Arouj.

The **New Mosque** *Jamâa el-Jedid*, or *Mosquée de la Pêcherie*, is situated at the corner of the Rue de la Marine and the Place du Gouvernement. It was constructed, according to a very doubtful tradition, in 1660, by a Genoese architect, who was subsequently put to death by the Dey, in consequence of having built it in the form of a Greek cross. It is surmounted by a large white cupola, with four smaller ones at the corners. The interior is much like that before described, bare and whitewashed, with mats round the columns and on the floor. There is, as in all other mosques, a fountain at the entrance, which the Mohammedans use for their ablutions before prayer. The square tower, or minaret, is about 90 feet high, and contains an illuminated clock. This mosque is used by the Hanefi sect. It contains a magnificently illuminated copy of the Koran, in folio.

The **Jamâa Safr**, in the Rue Kleber, and the **Jamâa Sidi Ramdan** in the street of that name, are so like those already described that it is unnecessary to do more than mention their names.

The **Beni M'zab** have a mosque for themselves in the Rue de Tanger.

The **Zaouia of Sidi Abd-er-Rahman eth-Thalebi**, overlooking the Jardin Marengo, is well worth a visit. It is open to visitors on Sunday, Monday, and Tuesday from 8 A.M. till noon and from 2 to 3 P.M. It contains the tomb of that saint, who died in 1471; around him are buried several Pashas and Deys, commencing with that of *Khadar Pasha*, A.D. 1605, and terminating with that of Ahmed, last Bey of Constantine. Lights are kept constantly burning on the saint's tomb, which is hung with variously coloured silk drapery; and offerings in the shape of lamps, banners, ostrich eggs, etc., are suspended from the roof. The proportions and details of the minaret and doorway beneath it should be noticed. After the Grand Mosque it is the most ancient religious building in Algeria, always of course excepting the tomb of *Sidi Okba* near Biskra, which dates from the 7th century.

There are many more of these koubbas in Algiers, but they resemble each other so much that a notice of one will suffice.

RELIGIOUS AND OTHER CEREMONIES.

The fanatic religious performances of the **Aissaoui**, or votaries of the religious confraternity of Sidi Mohammed bin Aissa, occasionally take place in the native quarter of the town, and indeed can always be got up for a consideration. (*Commissionaires* at the various hotels in town know how to accomplish this.) These commence by the beating of drums and tambours, after an interval of which, one of the Aissaoui, being inspired, rushes with a yell into the ring formed by the spectators, and begins a frantic dance, the body being swayed backwards and forwards, and contorted with fearful violence. He is soon joined by others, who continue their maniacal gestures and cries until they fall exhausted, or are stopped by the Mokaddam (head of the order). The next proceeding consists of forcing out the eyes with iron spikes, searing themselves with red-hot iron, eating

live scorpions and serpents, chewing broken glass and the leaves of the prickly pear, etc., all of which acts seem to be performed under the influence of fanatical mania, the performers being apparently insensible to pain. The sight may be worth seeing once, for those who have tolerably strong nerves, but few persons would care about witnessing an Aissaoui *fete* a second time.

Very curious **sacrificial rites** are celebrated on the sea-shore near St. Eugène every Wednesday morning at sunrise, by some of the lower classes of natives, the object of which is to cure diseases, and to obtain various benefits. To effect this, they slaughter a fowl or lamb, after certain incantations and burning of incense, and smear themselves with its blood, in which the virtue is supposed to reside. If the dying bird flutters in the water, it is hailed as a good omen. Persons of different races in Algiers take part in these ceremonies, which must not, however, be supposed to have anything to do with the true Mohammedan worship. It is a very ancient ceremony, and was minutely described by Père Dan in the beginning of the 17th century, who says, "Elles couppent la teste à un coq, dont elles font découler le sang dans ce mesme feu, et en abandonnent la plume au vent après l'avoit rompuë en plusieurs pieces qu'elles sement de tous costez et en jettent la meilleure partie dans la mer."

The Negroes also perform sacrifices in the Arab town annually on the feast of the Prophet's birthday, the *Moulid en-Nebbi*, which occurs on the 12th of the month *Rabia el-ouel*. They are curious, but disgusting.

PUBLIC BUILDINGS, INSTITUTIONS, ETC.

Four **Aqueducts** supply the city with water. They were erected in 1622 by Kader Pasha, and are called the aqueducts of *Hamma*, of *Telemli*, of *Aïn Zeboudja*, and of *Bir Trariah*.

A **Barrack**, formerly used by the Janissaries, now serves the same purpose for French troops in the Rue de la Marine. The barrack in the Kasba was formerly the palace of the Pasha. The largest barrack is the *Caserne d'Orléans*, N. of the Kasba, which can contain an entire regiment.

Baths. See Index.

The **General Cemetery** of Algiers and St. Eugène is on the road to the latter village, opposite the Fort des Anglais. It is in the usual French style, certainly not pleasing to English eyes. A portion of it, corresponding to the ancient consular cemetery under the Turkish Government, has been appropriated for the use of the consular corps and their families, and no interment in it is permitted without the sanction of the dean of that body, the senior Consul-General.

A little farther is the **New Cemetery** belonging to the *Jews*, their ancient one having been taken for public purposes.

The **Cemetery of the Commune of Mustapha** is on the top of the hill above the Champ de Manœuvres; access is obtained either by Fontaine-bleue, by the Boulevard Bru, or by the Colonne Voirol. A portion of this has been appropriated for the use of the English and American community, and was consecrated by the Bishop of Gibraltar in 1871. It has been planted with shrubs and flowers, and is carefully tended at the cost of the English residents.

There are two **Mohammedan Cemeteries**, one at Mustapha (see Arab Cemetery, p. 109), and the other near the Kasba.

Champ de Manœuvres. See p. 109.

The **Club (Officers')**, next to the theatre, occupies part of the site of one of the Janissaries' barracks. It contains a monument of historic interest, a Moorish fountain, with twisted columns, regarding which M. Feraud tells the following anecdote:—When General de Bourmont left Toulon for Algiers he took with him a number of

printed proclamations, announcing to the Arabs that he came to deliver them from the oppressive yoke of the Turks, and to suppress piracy. Some one was required to distribute these documents, and the interpreter, George Garoué, volunteered for the dangerous service. He was landed on the coast on the night of the 13th June 1830, that before the debarkation of the French army. He was arrested and taken before the Pasha of Algiers, who ordered his head to be sawn off on the edge of this fountain, which then decorated the Court of the Kasba.

Club (English). The *great desideratum* at Algiers has always been some place where English and Americans might meet together, and enjoy something like social life. Thanks to the public spirit of a few of the principal residents, a club of unusual excellence has been established in the Villa de Royer at Mustapha Supérieur. It is situated in beautiful grounds, with lawn-tennis courts, and is abundantly supplied with current literature. Entertainments of various kinds are given every Monday during the season. This is strongly recommended to all visitors. (See also Index.)

Educational Establishments.—The superior course of instruction at Algiers consists of a School of Law, with twelve professors; a School of Medicine, also with twelve professors; a School of Science, with six; and a School of Letters, with seven professors, located in a large and handsome college at the Agha. Very interesting lectures are given in the School of Letters on the history, antiquities, geography, and languages of N. Africa.

The **Zoological Station** is an adjunct of this school, and is situated near the admiralty. It is intended for serious study, and not for popular amusement. It has an aquarium, well-arranged laboratories, a zoological library, and all that is necessary for the study of minute marine organisms of every description. The great feature, however, is the apparatus for instantaneous microscopic photography by means of electric light.

The **Lycée**, in the Place Bab-el-Oued, receives both Europeans and natives.

The course of instruction is precisely similar to that of all other Lycées in France; but the great objection to it is the mixture of races amongst the pupils, Christians, Jews, and Mohammedans being all educated together.

There is a **Petit Lycée** for younger children in the country at Ben Aknoun.

There are many other schools, both Catholic and laic, in various parts of the town and country. The best girls' schools are the convents of the **Sacré Cœur** at Mustapha Supérieur and of the **Doctrine Chrétienne** in town.

The modern **Gates** are the *Passage de Constantine*, close by Fort Bab-Azoun; the *Port d'Isly*, just above the former; the *Porte du Sahel*, leading from the upper town towards the W.; and the *Porte Bab-el-Oued*, leading to St. Eugène and Pointe Pescade.

The **Military Hospital**, or **Hôpital du Dey**, is situated outside the town at a distance of about a kilomètre, in the beautiful gardens which surround the country residence of the last Dey. It is well protected against the violent N.W. winds of winter by the hill of Bou-Zarea, and is open to the refreshing sea-breezes so necessary in the summer months. This magnificent establishment is well worthy of a visit, and the *économe* in charge will gladly give the necessary permission on application. It consists of numerous series of buildings, spacious, lofty, and well lighted, capable of containing 600 or 700 beds, or even more on an emergency, fitted with every requisite that the present advanced state of hygienic science can devise; baths of every description, covered promenades fitted as smoking galleries, with comfortable seats, and decorated with tropical plants; separate lodgings in the Dey's villa for officers, a chapel, and laboratories of various kinds. It would be difficult to find in any part of Europe a hospital better conducted, or fitted up more carefully with everything likely to restore the health or minister to the comfort of the patients.

The **Civil Hospital** is at Mustapha Inférieur, and can make up 450 beds. It is visited by the best French doctors in Algiers. The patients are attended by Sisters of Charity, as well as by the regular hospital attendants.

Jardin d'Essai. See *post*.

The **Library and Museum**, situated in the Rue d'Etat-Major, will soon change its character. The Museum will be transferred to a new building at Mustapha Supérieur, now (1895) in course of construction, on the site of the old *École-Normale*. The existing structure will then become the "*Bibliothèque Nationale d'Alger*." In the meantime we can only describe it as it actually exists.

The building was erected in 1799-1800 as the palace of Mustapha Pasha, who was murdered in 1805; his tombstone is actually amongst the objects in the Museum.¹

The Library contains 30,000 volumes and 2000 MSS., of which latter a valuable catalogue has been published by M. Cagnan.²

The Museum is on the ground-floor, and is open at the same times as the Library. There are a few pieces of ancient sculpture, amongst others a torso of Venus, found at Cherchel; a statue of Neptune, larger than life-size; a group of a Faun and Hermaphrodite, similar to one existing at Rome, and figured in Clarac, *Musée de Sculpture*, Pl. 671, No. 1736. There are also two sarcophagi of the early days of Christianity, discovered at Dellys. One has sculptured representations of Daniel in the lions' den, and Shadrach, Meshach, and Abed-nego in the furnace. The second is much finer, and contains representations of several scenes in New Testament history, such as the miracle of Cana in Galilee, of the loaves and fishes, etc. Each scene is placed between two Corinthian twisted columns. There are also some

¹ An elaborate account of this edifice is given by M. Gavault in *Rev. Afr.*, Nos. 214-215, of 1894.

² *Cat. Gén. des MSS. des Bib. Pub.* tom. xviii., Alger, 1898.

good fragments of mosaic work, including a Bacchus, and a piece of inlaid flooring. A plaster cast of the print left by the body of St. Geronimo in the block of concrete is also to be seen (see p. 99). There is also a collection of medals and old Algerian money. Some of the best sculptures and mosaics found in Algeria have been removed to Paris.

Library (English). See Index.

Markets. See Index.

The **Palace of the Governor-General**, in the Place Malakhoff, was formerly the house of Hassan Pasha. The white marble columns which form the peristyle are handsome; so are also the pillars of the *salle-à-manger*. The drawing-room is decorated in a very ornate Moorish style.

Shops and Bazaars.—The best shops for European goods are in the Rues Bab-el-Oued, Bab-Azoun, de la Lyre, and de Chartres. They are usually good, and hardly dearer than in France. Meat is excellent, and about the same price as in England. Game is abundant and very good. Vegetables, fruit, and flowers are cheap, and most excellent. Every sort of clothing can be bought of good quality and at reasonable prices in the streets above named. Photographs are especially good.

The bazaars where the best articles of Arab and Moorish manufacture can be obtained are on the Boulevard de la République, in the Passages leading from the Place du Gouvernement to the Rue de Chartres, and in the Rue de la Lyre.

Of the many establishments devoted to the sale or manufacture of what are called *objets arabes*, none is more worthy of a visit than that of Madame Benaben, grand-daughter and successor of Madame Luce, in the Rue du Rempart Médée. The latter lady devoted her whole life to two most laudable objects—the perpetuation of the exquisite embroidery for which Algiers has always been famous, and which, but for her, would now have become an

extinct art; and the endeavour to teach Arab women to gain their livelihood in an honest manner. In their youth they are taught to work at the establishment, and when they marry and settle in life they continue to work at home, and bring the produce of their industry there for sale. Such thoroughly good “woman’s work” is worthy of the highest praise and encouragement. Another person who has had the merit of perpetuating an art which had almost become extinct is M. Marlier in the Rue Dumont d’Urville. He makes most beautiful trays and other objects in brass, and has a true feeling for Moorish art.

The traveller must beware, if he be dealing with Moors, and Jews especially, of giving the sum first asked; these always put on an increased price in the expectation of being beaten down. For further particulars see Index.

Theatres. See Index.

THE HARBOUR.

The **Inner Harbour** of Algiers, originally made by Kheir-ed-din in 1518, consisted of a mole connecting the town with the rocks on which the lighthouse now stands, but on which *Fort Peñon* stood formerly. The *Lighthouse* is octagonal in form, and was built in 1544 by Hassan Pasha, on the old Spanish basement. The summit of the tower is about 120 feet above the sea-level, with a fixed light, and can be seen for 15 m.

In the Bureau de la Marine (formerly a Turkish prison), on the N.E. side of the harbour, is a **picturesque doorway**, ornamented with marble inlaid with colour of the 17th century.

The present harbour, commenced in 1836, is formed by continuing this mole towards the S.E. A similar mole beginning near the Fort Bab-Azoun runs E. for some distance, and then, turning N., terminates within about 350 yards of the preceding, the entrance to the harbour being between the two. At each extremity stands a fort. These breakwaters are interesting as being

the first experiment tried of constructing such works with blocks of concrete. The harbour has an area of 90 hectares (222 acres), and an average depth of about 40 feet.

Two docks have been constructed, capable of containing the largest vessels.

There are two basins for discharging ships near the centre of the quays, which extend along the edge of the harbour for a distance of about 700 yards; the arches under the Boulevard de la République are used for warehouses and various other purposes.

In excavating for the present streets in the marine quarter, the foundations of the ancient town of *Icosium* were laid bare. A Roman street existed where the Rue de la Marine now lies; and two Roman cemeteries were discovered near the Rues Bab-el-Oued and Bab-Azoun. *Icosium* was probably not a large town, and all traces of it have now disappeared.

FORTIFICATIONS.

Of the ancient fortifications of Algiers, the chief are:—

The **Kasba**, or **Citadel**, situated on the highest point of the city; it was commenced by Arouj in 1516 on the site of an older building, and its history was the history of Algiers down to the conquest, at which period it was still the palace of the Deys, and was defended by 200 pieces of artillery. Here it was that the last Dey gave the now historical blow with his fan to the French Consul, which cost him his dominions. It was much injured by the French after the siege, a road having been cut right through the centre, the mosque turned into a barrack, and the rest of the building appropriated to military purposes. The enormous treasure found here was stored in vaults, traces of which are yet to be seen, and the ancient door lined with sheet-iron still exists, above which is a wooden gallery where the beacon and banner were displayed. There is also a minaret, and some marble columns and arches, which belonged to

the ancient building. But the historical pavilion where the *coup d'éventail* was given has been allowed to fall into decay, and the walls have everywhere been despoiled of their beautiful tiles by the military engineers.

The **Fort de l'Empereur**, so called from being built on the spot where Charles V. pitched his camp during his disastrous attack on Algiers, after his retreat. It was constructed in 1545 by Hassan Pasha, the son and successor of Kheir-ed-din, and for a long time it bore his name. It is situated above the Kasba and without the town, the whole of which it commands. It was here that General de Bourmont received the capitulation of the Dey of Algiers. It was blown up by the French when they took Algiers, and is now used as a prison for officers.

The **Fort des Anglais**, which was built in 1825, as a protection against future bombardments by the English; the **Fort de l'Eau**, 18 kil. from Algiers, between that place and Matifou. There is a fort erected on Cape Matifou, and another on the Pointe Pescade. At the end of the Boulevard de la République stands the **Fort Bab-Azoun**, now connected with the line of works; it was built by Hussein Pasha in 1581; and on one side of the Place Bab-el-Oued is the **Fort Neuf**, both now used as military prisons. A wall was built by the same Pasha, which was in some places of great thickness. It was surmounted by battlements, and pierced with loopholes, and extended from the Kasba to the Fort Neuf on one side, and to the Rue de la Lyre on the other. This has been almost entirely destroyed to make room for modern improvements.

Modern Defensive Works.—The French line of works, consisting of a rampart, parapet, and ditch, strengthened by bastions, commences above the Kasba in the quarter of the Tagarins, and stretches to the sea on either side, terminating in the Place Bab-el-Oued to the N.; and in the Fort Bab-Azoun, towards the S.

The improved means of attack of late have rendered these fortifications useless, and they are about to be demolished.

Important isolated works have been constructed on the heights of Bou-Zarea, in the Vallée des Consuls, above the Jardin d'Essai, and on the heights above the English Church to the S. of the town. These are all armed with improved modern artillery.

MUSTAPHA SUPÉRIEUR.

Persons who intend spending more than one or two nights in Algiers are recommended to stop at one of the hotels (see Algiers, in Index) at **Mustapha Supérieur**, which is within easy access (2 m.) of the town by omnibus every half-hour, or by carriage (3 f.) Mustapha Supérieur is well situated on the slopes of the hills S. of Algiers amongst gardens and pine woods, and commands extensive views; and being at a considerable elevation above the sea, it has the great advantage of being fresher and more healthy than the town. This neighbourhood, with the adjoining plateau of **El-Biar** (600 feet above the sea), is the favourite residence of winter visitors to Algiers. Besides the best hotels there are here numerous Moorish and French villas in beautiful gardens, with magnificent views of sea and land, and the Governor-General's summer palace. It is hardly possible to find a more delightful residence in any part of the Mediterranean.

Hotels, English Club, Omnibuses, etc., see Index.

EXCURSIONS IN THE ENVIRONS OF ALGIERS.

1. El-Biar and Bou-Zarea.
2. Colonne Voirol, Birmandraïs, Ravine of Femme Sauvage and Jardin d'Essai.
3. La Trappe, Sidi Feruch, Guyotville, Pointe Pescade.
4. Notre Dame d'Afrique, and Valley of Consuls.
5. Maison Carrée.
6. Fouduk and Barrage of Khamis.
7. Cape Matifou and Rusgunia.
8. Gorge of Issers, Palaestro, and Dra el-Mizan.
9. Blidah and Gorge of Chiffa.

10. Hammam R'irha.
11. Milianah.
12. Fort National.
13. Teniet el-Ahd (Cedar Forest).
14. Tipasa and Cherchel.
15. Tombeau de la Chrétienne.

(1.) To **El-Biar** and **Bou-Zarea**.—The traveller may either ascend by the Mustapha road, passing the Governor-General's palace, and turning to the right at the Colonne Voirol, or he may follow the Tournant Rovigo, pass the Kasba, and the reservoirs for supplying the upper part of the town with water, and leave Algiers by the Porte du Sahel. We shall assume that he takes the latter route. There are several omnibuses daily to El-Biar and Bou-Zarea, but it is best to take a carriage, fare 7 f.

3 kil. FORT L'EMPEREUR. See p. 105.

[4 kil. A bridle path to the right leads down the **FRAIS VALLON**, a picturesque and shady ravine, in which are situated the mineral springs of *Aïoun Srakna*, reputed to be of considerable medicinal value. The path ends at the Cité Bugeaud, the faubourg of Bab-el-Oued.]

5 kil. **El-Biar** (Ar. *The Wells*). A long straggling village lying for some distance along the road. The commune extends as far S. as the Colonne Voirol, and is the most charming and healthful part of the environs of Algiers. It contains many of the best villas occupied by English residents during the winter season, amongst others that of H.M. Consul-General; the Château d'Hydra (Mr. E. Ledgard), and the beautiful house and grounds of Mr. Macleay.

There are also several convents; one to the W. of the village is that of the *Bon Pasteur*, a reformatory and refuge for women, as well as an asylum for children. Nearer the Colonne is an orphanage for girls, belonging to the Sisters of St. Vincent de Paul; still farther on, another belonging to the same sisterhood for boys; and between the two the head establishment of the *Frères de la Doctrine Chrétienne*, who have primary schools for boys all over the colony.

A large house just outside the village on the left (Maison Couput) is that in which *Maréchal de Bourmont* established his headquarters, and where the final surrender of Algiers was agreed to, through the mediation of Mr. St. John, the British Consul-General.¹

6 kil. *Château Neuf*, a wayside *auberge*. Here the road bifurcates; the lower branch leads to *Ben Aknoun* (8 kil.), once a Jesuit orphanage, now the Petit Lycée, for a younger class of boys than those received in town. Here also are the springs of *Aïn Zeboudja*, whence the upper part of Algiers is supplied with water; and *Deli Ibrahim* (11 kil.), where is a Protestant orphanage. The upper branch leads to *Cheragas* (12 kil.)

7 kil. From the latter of these branches, the *Chemin Vicinal de la Bou-Zarea* turns sharp off to the right. About half way to the village is a vast building, erected for a lunatic asylum, now partly occupied as an *École Normal*.

9 kil. *Bou-Zarea*, a small European village situated on a mountain of the same name 1150 feet above the sea. The native village is about 1 kil. farther on to the left. It contains several *koubbas*, notably that of *Sidi Naïman*, situated in enclosures of prickly pear, amongst which are dwarf palms of such unusual height as entirely to belie their name. The summit of the hill is occupied by a cemetery, whence a glorious panoramic view is obtained of the country in every direction.

A new and even more picturesque road from *Bou-Zarea* to *El-Biar* has been made on the opposite side of the *École Normal*; the tourist can go by one and return by the other.

[From this point a road, rather rough, but practicable for light carriages, leads to *GUYORVILLE*, 9 kil. farther on. About half way, to the N. of the road, is the forest of *Aïn-Beinan* (see p. 110), whence the high road to Algiers may be reached near *Cape Caxine*, at a point distant 11 kil. from the city.]

¹ See *Scourge of Christendom*, p. 319.

The traveller may return from *Bou-Zarea* by a lonely tortuous road leading to the faubourg of *Bab-el-Oued*. After passing the village, to the E., the road bifurcates; the upper branch conducts to the *Observatory*, 1700 mètres from the village, built in an open space of about 12 acres in extent, 350 mètres above the level of the sea, where once stood a Turkish fort. Probably no observatory in the world is more favourably situated, while the buildings and instruments are worthy of it and of France. One of the instruments is of historical interest; it is a reflecting telescope constructed by the celebrated *Léon Foucault* with his own hand. The Director is most courteous to visitors. The lower branch leads to the town; about a third of the way down is the *Hospice des Vieillards*, kept by the *Petites Sœurs des Pauvres*, an excellent charity, well worthy of a visit. About 100 old men and women find an asylum here, and as it is entirely supported by voluntary contributions, donations, either in money or old clothing, are gratefully received.

(2.) To the *Colonne Voirol*, *Birmandrais*, Ravine of the *Femme Sauvage*, and back by the *Jardin d'Essai* (6 f.)

The road leaves the town by the *Porte d'Isly*, and passes through the district of *Mustapha Supérieur*.

4 kil. The summer *Palace of the Governor-General*.

In front of it is a statue of *Maréchal de MacMahon*.

5½ kil. The *Colonne Voirol*. A small village named from the column which records the construction of the road by General *Baron Voirol*. He was the last of the *commandants en chef* of the army of Africa, and it was under his administration in 1833 that France finally determined to retain possession of Algeria.

[A road to the right leads to *El-Biar*. There are numerous beautiful walks in the neighbourhood.]

8 kil. *Birmandrais*, a pretty little village in a well-wooded hollow. The proper orthography is *Bir Mourad Rais*,

"well of Mourad the captain," a celebrated renegade Flemish corsair.

[3 kil. farther, on the high road, is the village of **Birkhadem**, "the well of the slave," so called from a picturesque Moorish fountain in the market-place. In the fort above the village is a military penal establishment, and there is a female orphanage for girls on the cross road leading hence to Koubba.

Instead of driving down the valley of the *Femme Sauvage*, the traveller may vary the excursion by returning from Birmandrais through Koubba and the Ruisseau. There is a lovely shady road which passes through *Vieux Koubba*, 3 kil. from Birmandrais; 2 kil. farther on is the new village of **Koubba**, the principal feature of which is the *Séminaire* or Ecclesiastical College, containing two branches, one for about thirty boys, and the other for an equal number of older students, who are usually deacons or sub-deacons. In the centre of the building is the church, the immense dome of which is one of the most prominent objects in the landscape seen from Algiers and Mustapha. The place owes its name to a small Mohammedan *koubba* or tomb, situated in the garden, now converted into a chapel. The grounds are very extensive, and chiefly laid out in vines. On the north side there is a *Chemin de la Croix*, with chapels, grottoes, and sculptured stations. In the village is a statue to one of the finest of the old type of Algerian soldiers, General Margueritte, killed at Sedan. It is the work of Albert Lefevre.]

At Birmandrais, close to the church, the road to the Ruisseau branches off to the left, through the beautifully wooded valley of the **Femme Sauvage**, so named after a young lady, by no means shy, who kept a café restaurant in this ravine shortly after the French conquest. It joins the high road below at the 6th kilomètre from Algiers.

Turning now to the W., we reach the **Jardin d'Essai**, a garden of about 200 hectares in extent. This was com-

menced in 1832, and while it remained in the hands of Government it was kept up with great care, but at a great expense; now it is in the hands of the *Compagnie Générale Algérienne*, and the commercial element is more considered than the advancement of science. Still it is a delightful promenade, and it contains a most interesting collection of plants, both in the open air and in greenhouses. Ornamental plants are cultivated in great numbers and exported to the principal cities of Europe. The avenues of planes, palms, bamboos, and magnolias are especially worthy of notice.

On the opposite side of the road, on the slope of the hill, is another portion of the same garden, principally devoted to Australian plants, such as eucalyptus, araucarias, acacias, etc., the whole crowned by a wood of Canary pines. There is a fine old Moorish house in it, now in a very dilapidated condition. The gardens are open to the public; and at the *Café des Platanes*, just by the entrance, coffee and other refreshments may be obtained.

It was here that the Emperor Charles V. commenced, on the 23rd October 1541, to disembark his army of 24,000 men, the *débris* of which were re-embarked on board such of his vessels as escaped the tempest eight days later at Cape Matifou. In the *Propriété Sabatery* close by is a grotto in which Cervantes and his companions are supposed to have resided for some time, when making a fruitless attempt to escape from captivity. A bust and a memorial tablet were erected on the spot in 1894.

Here it may be well to give some account of the company to which this garden has been let for a nominal rent of 1000 f. a year. A convention was passed between the *Société Générale Algérienne* and the Imperial Government in 1865, stipulating that it was to have a capital of 100 millions of francs, to be devoted exclusively to industrial and agricultural works, the exploitation of mines and forests, the erection of barrages and irrigational canals, the establishment of manufactories, etc. It was to lend a further

sum of 100 millions of francs to the State, to be applied in similar works of public utility, and the Government made over to the company 100,000 hectares (250,000 acres) of the best land in the colony at a nominal rent of 1 f. per hectare per annum during fifty years. The company totally failed in all these conditions; it confined itself to financial operations, mostly out of Algeria, and met with serious losses. In 1878 it was liquidated, and a new society called the *Compagnie Générale Algérienne* took its place, with no more change than is expressed by its title.

On the S. of the road farther on ($4\frac{1}{2}$ kil. from Algiers) is an Arab Cemetery, in which is the small *Koubba of Sidi Mohammed ben Abd-er-Rahman bou Koberain*, "the man with two tombs." It was he who founded the religious confraternity which bears his name, and to which a vast number both of Kabyles and Arabs are affiliated. After having made a voyage to Egypt, he inhabited Algiers under Baba Mohammed Pasha, and subsequently died in Kabylia, in the country of the Beni Ismail, a branch of the Guechtoula, of which he was a native, and there a tomb was raised over his remains. The Algerians caused the body to be carried off and interred where it now lies, and the excitement caused by the act was only appeased by giving out that the body of the saint had been miraculously doubled, and rested in both tombs. Great numbers of Moorish women visit this cemetery every Friday afternoon.

Farther on, to the N. of the road, is the *Champ de Manœuvres*, used as a racecourse and exercising ground for troops. It was large enough to allow 25,000 men to be reviewed at once; but it has been considerably reduced in size by the construction of a new arsenal. Here commences *Mustapha Inférieur*, on the lower slope of the hill on which *Mustapha Supérieur* is situated. Beyond this is the *Agha*, containing manufactories and workshops, cart and carriage factories, corn and saw mills, gas-works, etc., and the female prison in the buildings of the old Lazaretto.

(3.) To *La Trappe*, *Sidi Feruch*, *Guyotville*, and *Pointe Pescade* (20 f.)

Drive by El-Biar to Château Neuf, as in excursion (1); 6 kil.

12 kil. *Cheragas*, situated at the entrance to the plain of *Staouéli*. The country round is very fertile, and there are several distilleries here for making essence of geranium and other scents.

17 kil. *La Trappe de Staouéli*. The Trappists obtained leave from the Government in 1843 to build a monastery, and were granted about 2500 acres of the surrounding land, which was then almost a wilderness, but which has been transformed by their exertions and industry into a fertile country, producing vines, oranges, fruit-trees, and all species of cereals and vegetables. There are two corn-mills, the water for driving which is brought by an aqueduct 30 feet in height.

The monastery itself is a rectangular building, containing a courtyard surrounded by cloisters, and a chapel which occupies one wing of the building. The walls are covered with inscriptions calling to mind the miseries of life, among which may be seen the following:—"S'il est triste de vivre à la Trappe, qu'il est doux d'y mourir." To the left is the farm, containing the stables and sheds for the large flocks and herds of the establishment, and to the right are the various workshops, the forge, bakehouse, wheelwrights' and carpenters' shops, wine vaults, dairy, etc. The cemetery is close at hand. Facing the monastery, in the midst of a clump of palm-trees springing from a single root, stands a statue of the Virgin, *Nôtre Dame de Staouéli*. The monastery is built on the spot where the battle of *Staouéli* was fought between the French and Turks on 19th June 1830. The number of monks is about 100.

The small town of *Staouéli* is $1\frac{1}{2}$ m. N. of *La Trappe*.

25 kil. *Sidi Feruch*, more correctly *Sidi-Furruj*, celebrated as the landing-place of the French army on 14th June 1839, is an elevated peninsula, stretching 1000 yards into the sea, on the top of which stood a round tower

built by the Spaniards, and called *Torre Chica*.

Here was the koubba of the saint, regarding whom the following legend is told:—"A Spanish captain coming one day to the spot found the holy man asleep, and carried him on board his vessel to sell him in Spain, but notwithstanding that the wind was favourable and filled his sails, the ship remained immovable. The Christian understood that this was a miracle, and ever afterwards remained the devoted friend and follower of Sidi-Furruj. Both friends were buried in the same grave."

In 1847 the remains of the two friends were disinterred, and reverently buried in the cemetery of Sidi Mohamed at the Oued Aggar at Staouéli.

The small village was founded in 1844, and for some time was an important place for the sardine fisheries, but was afterwards nearly abandoned. The new barrack, capable of accommodating 2000 men, is in the fort. The principal entrance is ornamented with sculptured trophies of peace and war. On the marble slab is the following inscription:—

ICI
LE 14 JUIN 1880,
PAR L'ORDRE DU ROI CHARLES X,
SOUS LE COMMANDEMENT DU GÉNÉRAL DE
BOURMONT,
L'ARMÉE FRANÇAISE
VINT ARBORDER SES DRAPEAUX,
RENDRE LA LIBERTÉ AUX MERS,
DONNER L'ALGÉRIE À LA FRANCE.

Here was found a chapel in memory of St. Januarius with the inscription:—

HIC EST JANVARI
I ET FILLII EJVS MEMORIA,
QVI VIXIT ANNIS XLVII MENSIBVS V
DISCESSIT IN PACE VI . . . ANNO PROVINC.
CCCCX.

Return by the sea coast, passing **Guyotville**, 15 kil. from Algiers. This village is named after Comte de Guyot, director of the Interior from 1840 to 1846, built in 1845 on the site of an Arab village, Ain-Beinan. Just beyond it on the sea-shore are some Roman quarries. Turning off here to the right, the road to Cheragas crosses an undulating and partly uncleared

country. About half way, and a little more than a mile to the W., in the Oued Beni Messous, are about a dozen megalithic monuments still entire, and a considerable number in a less perfect state of preservation. These consist of dolmens—large tabular stones, supported on four upright ones. Several interesting objects have been found in those that have been opened, such as bones, pottery, bronze ornaments, etc.

Cape Caxine, 12 kil. from Algiers. On the summit is a lighthouse, with a revolving light of the first order, visible at a distance of 24 m.

At 10½ kil. from Algiers, to the S. of the road, is the forest of **Ain-Beinan**, about 100 hectares in extent, planted by the Department of Forests in 1867-70; it consists of Aleppo pines, eucalyptus of various species, casuarinas, cork oak, Australian acacias, and other trees. It is full of beautiful views, and is a favourite place for picnics. At the *Maison Forestière* is a spring of good water. There is a rough road, practicable for light carriages, from this place to Bou-Zarea.

At 6 kil. from Algiers is **Pointe Pescade** or *Mersa-ed-Debban*, a reef of rocks running out into the sea, on which stands the ruins of the fort of the same name, built in 1671 by El-Haj Ali Agha, and restored in 1724 and 1732. Behind it are the ruins of another fort, now utilised as a custom-house station, said to have been the residence of Baba Arouj (*Barbarossa*).

There is a restaurant here, at which fish dinners and breakfasts can be obtained.

At 3 kil. from Algiers is **St. Eugène**, a village principally occupied by Jews; it is rarely visited by winter visitors, as the situation is less healthy than Mustapha Supérieur, and there are scarcely any walks save along a crowded and dusty public road.

2½ kil. from Algiers is the general cemetery, and then follows the **Cité Bugeaud**, or faubourg of Bab-el-Oued.

Omnibuses run every few minutes from the Place du Gouvernement to St. Eugène, and even farther.

(4.) To **Nôtre Dame d'Afrique** and the **Valley of Consuls**. (4.50 f. to the church.)

A steep drive from the gate of Bab-el-Oued, passing behind the Military Hospital, leads to **Nôtre Dame d'Afrique**, conspicuously placed on a shoulder of Mount Bou-Zarea, having a magnificent view of the city and the sea. It is built in the Romano-Byzantine style of architecture, and has by no means an unpleasing effect. The walls of the interior are covered with votive offerings of all kinds, amongst which those of sailors predominate; indeed, this class of the community has made the church particularly its own. Above the altar is a *Black Virgin*, and around the apse the inscription, "Nôtre Dame d'Afrique priez pour nous et pour les Musslemans."

Every Sunday a ceremony is performed which has no parallel perhaps in any other church in the world. About 3½ p.m., after vespers, the clergy chant the prayers for the dead, and go in procession to the point overhanging the sea, where, before a catafalque, the officiating priests perform all the ceremonies over this vast grave, which the church appoints for ordinary funerals. This interesting ceremony has been shorn of much of its solemnity since the death of the great Cardinal. It is painful to see how many of his cherished ideas have fallen into disfavour during the present ecclesiastical régime.

There is a curious statue of the Archangel Michael in this church, made of solid silver, valued at about £4000; it belongs to the confraternity of Neapolitan fishermen, and is enclosed within a rail of gilt iron at the W. end of the church. Near the church is the *Carmelite Convent*, built at the expense of a princess of the Roumanian House of Bibesco, who became the first Superior.

Beyond **Nôtre Dame d'Afrique** is the *Valée des Consuls*, so called from it having been the favourite residence of those functionaries during the time of the Deys. The farthest-off house on the road was the British Consulate,

figured in Mrs. Broughton's book. Half way between this and the church, on the N. side of the road, is the *Petite Séminaire*, on the site of the old French Consulate. Here Cardinal Lavigerie died; it is the country residence of the Archbishop of Algiers. Opposite to it, on the S. side of the road, is the old American, and a little higher up the Sardinian Consulate. The drive here is exceedingly beautiful; and as it has been very little changed, it gives a good idea of what the environs of Algiers were like during the time of the Deys. From the Séminaire a footpath leads to Bou-Zarea.

(5.) To **Maison Carrée** by the lower road, N. of the Jardin d'Essai by steam tramway.

2 kil. *Mustapha Inférieur*.

4 kil. The *Abattoir*, to the S. of road.

5 kil. *Jardin d'Essai*.

5½ kil. *Village of Hussein Dey*.

6 kil. *Artillery Polygon*, or practice ground.

11. kil. **Maison Carrée**. The old Turkish fort on the top of the hill, from which this village derives its name, and which is now used as a prison, was built in 1721 by the Dey Mohammed Effendi, to prevent the landing of an enemy at the Harrach. It was rebuilt by Yehia Agha on a greater scale in 1826, to serve as a starting-point for the various excursions made by the Turks in the interior.

Near the village is the Convent of the White Fathers, a missionary order established by Cardinal Lavigerie for the conversion of the remote regions of Central Africa. They wear the Arab costume, learn the Arabic language, and accustom themselves to live entirely like natives. An attempt to send them through the Sahara signally failed; they were assassinated on their way, and they have since been sent into the interior of the continent, principally to Uganda, from Zanzibar, and to Timbuctu. They have created an important agricultural establishment here, and are especially celebrated for the cultivation of vines.

In connection with this establishment are orphanages both here and at St. Charles, between Koubba and Birkhadem.

(6.) To **Fonduk** and the **Barrage of the Khamis**.

Omnibuses run twice a day to Fonduk (32 kil., 1.50 f.); but the best means of doing the excursion is to take the earliest train in the morning to Maison Blanche; the omnibus from Algiers arrives a few minutes later, and the traveller can continue in it to Fonduk. He can obtain a carriage at the *Hôtel Gessin* to visit the barrage (5 f.), and return in time for the omnibus which leaves for Algiers at 2½ p.m., arriving at 6 p.m.

Fonduk is not a particularly prosperous village, but it hopes to improve its condition when the barrage is finished. It owes its name to an Arab caravan-serail which existed on the spot. About 1 kil. to the S.E. are the ruins of a large fort built in the first year of the French occupation. The village is picturesquely situated on the left bank of the river Khamis, at the foot of the first slope of the Atlas.

About 7 kil. farther up a dam or barrage has been built at a cost of 3 millions of francs. It has a height, equal to the breadth of its base, of 35 mètres; the foundations are 6 mètres deep, and repose on an impermeable stratum; the construction is of solid rubble, built with hydraulic cement; the wall exteriorly rises in a curve, and has a width at the top of 4.75 mètres; the total length is 165 mètres. This dyke will contain an immense body of water, covering an area of 100 hectares, and with a depth of 35 mètres at the barrage. Although commenced in 1869, it is only just (1895) finished. It is well worth a visit, as it is the only important irrigational work in the province of Algiers.

In the mountain of *Bou-Zigza* (1032 mètres), near Fonduk, are some gorges which would repay exploration. There is a bridle path from Fonduk, passing this mountain, and terminating at Palaestro.

4 kil. E. of Fonduk is the village of *Arbatash*, founded in 1878.

(7.) To **Cape Matifou** and the **Ruins of Rusgunia**.

This may be done, if desired, by public conveyance, as omnibuses perform the journey twice daily in three hours.

18 kil. *Le Fort de l'Eau*, built in 1581, by Jafar Pasha. It owes its name to a famous well of water within the walls. The village close to the Fort was founded in 1850, chiefly by the Mahonnais, natives of Menorca. The land was then densely covered with brushwood; five years later it was thoroughly cleared, and now numerous *Norias*, each one irrigating 6 acres of land, have converted it into a productive market-garden, yielding easily an annual out-turn of £30 an acre.

20 kil. *La Rassauta*. In 1836 a Polish General, the Prince de Mir, obtained from the Government the grant of a large tract of land near this place, for the purpose of trying some experiments in agriculture, which, however, were not successful.

24 kil. *L'Oued Khamis*, where there is a small battery.

26 kil. *Rusgunia* ruins. This Roman city occupied in ancient times a circular area of great extent; and the mosaics, medals, columns, etc., which have been found scattered around seem to indicate that Rusgunia was an important colony. The *debris* of this city was extensively used as building material for Algiers.

The following inscription on a stone from these ruins, which is now built into the roof of a vault, used as a wine store, by the Intendance Militaire, almost below the statue of the Duc d'Orleans, proves the identity of Rusgunia:—

L. TADIO L. FIL. QUIR.
ROGATO
DEC. AED. IIVIR IIVIR
Q. Q. RUSG ET RUSG.
CONSISTENTES OB
MERITA QUOD FRU-
MENTUM INTULERIT
ET ANNONAM PAS
SV CIT INCRESCERE
AERE COLIATO.

"To Lucius Tadius, son of Lucius Quirinus, called Rogatus, the Decurions, *Ædiles*, Duumvirs, and the quinquennial Duumvirs of Rusgunia, and the inhabitants of Rusgunia, on account of his merit in furnishing corn, and contributing to the public stores. By subscription."

27 kil. *Matifou*, a small hamlet founded in 1853, on a promontory known to the natives as *Temendafoust*. The ruined fort was built by *Ramdan Agha* in 1661, when *Imail* was Pasha; and from it was fired the salute on the arrival of a new Pasha of Algiers. A short distance off is a fountain called in Arabic "*Ishrub wa harab*," signifying "Drink and go away." The caution was given because of the prevalence of fever, which seldom spared those who slept near by. It was at *Matifou* that the Emperor *Charles V.* re-embarked after his disastrous expedition against Algiers in 1541.

Near the end of the Cape is the *Lazaretto* built on the appearance of cholera at *Toulon* and *Marseilles* in 1884.

(8.) To the *Gorge of the Issers*, *Palaestro*, and *Dra el-Mizan*. Train in 3½ hours to *Palaestro*; fair accommodation (Rte. 8).

(9.) To *Blidah* and the *Gorge of the Chiffa*. Train to *Blidah* in 2

hours. This excursion may be done from *Algiers* and back in one day (Rte. 7).

(10.) To *Hamman E'Irha* (Rte. 10).

(11.) *Milianah*. Train to *Affreville* or *Adalia* in 4 to 6 hours; thence diligence to 8 kil. *Milianah* (Rte. 10).

(12.) *Fort National*. (Magnificent views of *Kabyle* mountains.) Train in 4 or 5 hours to *Tizi Ouzou* (fair accommodation); thence drive of 3 hours to *Fort National* (Rte. 6).

(13.) *Teniet el-Ahd*. (*Cedar Forest*.) Train in 4 to 6 hours to *Affreville*; diligence thence to 59 kil. *Teniet el-Ahd* (Rte. 5).

(14.) *Tipasa* and *Cherchel*. By railway to *El-Affroun*. Thence by steam tramway to *Marengo*, 1 hour, and by carriage to *Tipasa*, 1 hour, 10 f. Return to *Marengo* and take carriage or diligence to *Cherchel*, or go direct by night diligence from *Tipasa* to *Cherchel*.

(15.) *Tombeau de la Chrétienne*. By carriage from *Cherchel*, or by Route 3, or by carriage from *Marengo* and back (10 f.), or from *Marengo* to the *Tombeau*, and thence to the railway at *El-Affroun* (20 f.)

A FORTNIGHT'S TOUR IN ALGERIA.

Many travellers when leaving *Algiers*, probably for *Italy*, *via Tunis*, have only a short time at their disposal, and are anxious to employ it to the best advantage. The following route is recommended; it will enable them to see rapidly all that is most interesting in the colony, and to reach *Malta* within a fortnight.

First day.—To *Bougie*, either by sea or by railway (p. 115).

Second day.—By carriage, through the *Chabet* (Rte. 12); sleep at *Kharata* (or the traveller can go direct to *Setif* in one day by diligence).

[*Algeria*]

Third day.—Continue drive to *Setif*, and on by railway to *Constantine* (*q.v.*)

Fourth day.—At *Constantine*.

Fifth day.—To *Biskra* by railway.

Sixth day.—At *Biskra*.

Seventh day.—Return to *Batna*, and visit *Lambessa*.

Eighth day.—Visit ruins of *Timegad* (p. 219).

Ninth day.—Visit *Cedar Forest*.

Tenth day.—To *Hamman Meskoutin* by railway.

Eleventh day.—To *Tunis*, and within the fortnight the traveller can embark there either for *Malta* or *Marseilles*.

A TOUR IN THE PROVINCE OF ORAN.

Some travellers on leaving Algiers proceed westwards, to Spain or Gibraltar; to such, if they are not afraid of two days' travel in diligences, Route 25 is strongly recommended. It can be done in five days' actual travel, and a few more would be pleasantly and profitably spent at Tlemçen.

NEW MAP OF ALGERIA.

A new and very beautiful Map of Algeria is now being published at the *Depôt de la Guerre* at Paris, on a scale of 1 to 50,000, or 1'4 inch to the geographical mile. When complete it will consist of 327 sheets. The hill work is shown by a combination of shading and contours which is very effective. It is printed in three colours, and every detail is shown. It costs only 1 f. per sheet.

ROUTES.

ROUTE 1.

Algiers to Philippeville, Bône, Bizerta, and Tunis by Sea.

STEAMERS do the voyage each way once a week.

The steamer on leaving Algiers takes an easterly course towards *Cape Matifou*, where there is a fixed white light on a masonry tower seen 8 miles off; the passage across the bay affording a splendid panoramic view of the city and suburbs. A short distance beyond the cape are some rocks called by the Arabs *Mersa Toumtilin*, where the French steamer *Sphinx* was wrecked in 1845.

From Matifou the coast is low and uninteresting as far as

44 naut. m. Dellys. Pop. 4298.

The modern town is picturesquely situated on a plateau, and, like all the towns on the coast, faces the E.

The Arab town is to the N. of the modern one.

During part of the winter the harbour is almost inaccessible, though tolerably sheltered from the N.W. To the S. and W. it is surrounded by slightly elevated hills detached from

the last counterforts of the range which runs along the coast; it is, therefore, only partially sheltered from the N., the N.E., and E. winds. A steam tramway conducts to the railway at Bordj Boghni.

French Dellys contains large regularly built streets, and a square planted with trees. The town is surrounded by a wall, pierced with loopholes.

There is the usual *mosque* and church, a free school, a large hospital, and barracks for 800 men. The Arab town is ill-built, dirty, and crowded.

A school of *arts et metiers* has been established here, to replace that destroyed at Fort National during the insurrection of 1871. The building is very conspicuous from the steamer on approaching Dellys from the W.

From the lighthouse to the end of the promontory there is a splendid view of the coast, which is here bold and rock-bound. The soil is particularly favourable for cultivation, and the climate is considered healthy.

Dellys is built on the site of the Roman town of *Ruscantium*, the ancient ramparts of which are still visible on the western side. In 1857 a fine marble sarcophagus was discovered,

which is now in the museum at Algiers. Ruscurium was finally destroyed by an earthquake, and Dellys was built from its ruins.

55½ m. *Cape Tedles*. Near the modern village of *Taksebt* are the ruins of the Roman city of *Rusubeser*, and a little to the W. the more important ruins of *Tigzirt*, including a small temple in a good state of preservation. Θ

68½ m. *Cape Corbelin*, near which is *Azefoun*, now called *Port-Gueydon*, after Admiral de Gueydon, a late Governor-General, a village built on land obtained by sequestration after the insurrection of 1871. This was formerly a Roman position, *Rusazus*. The ruins of an aqueduct and of several solidly constructed buildings may yet be traced. Θ

103½ m. In about 10 hours after leaving Dellys the steamer passes *Cape Carbon*, or *El-Metkoub*, "the pierced," so called from a remarkable grotto or natural arch at its foot, through which a boat can pass in fine weather. Shaw mentions a tradition that it was a favourite resort of the celebrated anchorite Raymond Lully, who was subsequently stoned by the natives whom he hoped to convert, and who only survived long enough to reach his native Majorca. On the summit is a lighthouse of the first magnitude.

Beyond this is *Cape Noir*, and still farther, forming the eastern point of the Bay of Bougie, *Cape Bouac*, on which formerly existed a Turkish battery, whence the arrival of vessels was signalled to the town by the sound of an instrument called *bouc*, the sounder of which is in Arabic *bouac*. There is now a small lighthouse of the third order on the site of the old fort.

106 m. **Bougie** (Ar. *Boujaïa*). Pop. 12,226.

Bougie is the natural seaport of Eastern Kabylia, a region very distinct from the Kabylia of Djurdjura, of which Dellys is the port. The town is built on the slope of a hill, and commands a glorious view of land and water, with Mounts Babor and Ta-

babort as a background, 6455 feet high, crowned with forests of cedar and pinsapo. The poet Campbell, who visited Bougie in 1834, thus records his impression: "Such is the grandeur of the surrounding mountain scenery that I drop my pen in despair of giving you any conception of it. Scotchman as I am, and much as I love my native land, I declare to you that I felt as if I had never before seen the full glory of mountain scenery. The African Highlands spring up to the sight not only with a sterner boldness than our own, but they borrow colours from the sun, unknown to our climate, and they are mantled in clouds of richer dye. The farthest off summits appeared in their snow like the turbans of gigantic Moors, whilst the nearest masses glowed in crimson and gold under the light of the morning."

All the races who have successively inhabited Bougie during 2000 years—Carthaginians, Romans, Vandals, Berbers, Arabs, Spaniards, and Turks—have left considerable traces of their domination. The Roman *enceinte* is still traceable in some places; it had a perimeter of 3000 yards, and was further strengthened by detached works and a sea-wall. The Saracenic lines were constructed about A.D. 1067, and various portions of them still remain, notably a large arch at the landing-place, and two walls flanked by towers running up the side of the hill behind the city.

A very high state of civilisation existed in the 11th century, and it is curious to read in an old Arabic MS. how, during the reign of El-Mansour, in A.D. 1068, the heliograph, which we are fain to think a modern discovery, was in common use here. This prince was on very friendly terms with the Pope, who sent him 1100 artisans, skilled in their different professions. These erected a stately tower, which was called *Choufer-Riad*, "the Observatory of the Garden," on the summit of which was an apparatus consisting of mirrors, corresponding with similar ones established at different points, by the aid of which they could communicate rapidly from one

end of the kingdom to the other. During the night the signals were made by fires disposed in a pre-arranged manner.

In 1508, owing to the piratical practices of its inhabitants, Ferdinand V. of Spain sent an army and fourteen ships of war under Don Pedro Navarro, to take possession of it. He restored the *Kasba* or citadel in 1509, and the defensive works were further strengthened and restored by Charles V. in 1545, who himself took refuge at Bougie after his repulse at Algiers.

Leo Africanus, who published his *History of Africa* in 1526, says: "Wonderful is the architecture of its houses, its temples, colleges, and palaces." After the defeat of Charles V. at Algiers, the Algerians took advantage of the occasion, and marched with all their forces upon it. They stormed the castle on the harbour, and the citadel on the heights, so that Alonzo de Peralta, the Spanish governor, was fain to demand a capitulation. He was allowed to return with 400 men to Spain, where the monarch condemned him to lose his head. After this the city fell into decay, and when Algiers was taken by the French, Bougie had only a small garrison of Turks, commanded by a Kaid, and was not in a position to offer any serious resistance to General Trézel, who took possession of it on the 29th September 1833. The most interesting buildings at Bougie are the ancient forts: *Bordj el-Ahmer* (the red fort), of which the ruins are seen half-way between the koubba of *Sidi-Fouati* and the *Gouraiâ*, was, before its destruction by the Spaniards, the most ancient in Bougie, and here it was that Salah Rais established himself when he took Bougie from them.

The fort of *Abd-el-Kader*, on the right hand of the harbour as the traveller lands, was built before the arrival of the Spaniards in 1509, probably with the remains of an older Roman building, and was much injured by the earthquake of August 1856.

The *Kasba*, on the opposite side of the town, is rectangular in shape,

flanked by bastions and towers, some of which were destroyed in 1853. It was built by Don Pedro Navarro, on Roman foundations, and bears Latin inscriptions, of which the following are translations:—

"Ferdinand V., illustrious King of Spain, has taken this city by force of arms from the perfidious children of Hagar, in the year 1509"—and "This city has been furnished with walls and fortresses by the Emperor Charles V., the African, grandson and successor of Ferdinand. To God alone be honour and glory. The year 1545."

The fort *Barral* to the N.W. was also built by Pedro Navarro, and owes its present name to the fact of General Barral, who was killed in 1850, having been interred there. His remains have since been removed to the cemetery.

On the top of *Mount Gouraiâ* is the fort of the same name; below it is a barrack occupied by military prisoners; lower down to the W. Fort *Clauzel*, and on the beach, near the *Oued Seghir*, the Blockhouse *Salomon de Musis*, called after a commandant supérieur, assassinated by the Kabyles in 1836.

A new line of works has been constructed round the town, consisting of a masonry loopholed wall strengthened by bastions, and the whole place has been strongly defended by detached works.

Bougie, strictly speaking, had no port; it is situated in a deep bay, well protected from the N.W. and S., but quite exposed to the E. The ancient Roman harbour of *Saldæ* was that part of the bay between the *Kasba* and the forage park beyond; it was probably named after an older Phœnician harbour called *Saldou* or the *strong*. A new harbour is in course of construction, which will, when completed, contain an area of about 15 or 20 acres. The streets being built on the slope of the hill are very steep, and many of them are ascended by stairs. The gardens which formerly surrounded so many of the houses are disappearing before the inevitable modern improvements; still

there are some beautiful walks and magnificent old olive trees in the immediate vicinity—notably beyond the *Fort Abd-el-Kader*. Below the gate of the *Grand Ravin* may be traced the remains of an amphitheatre, in the arena of which is the tomb of the commandant Salomon de Musis. Numerous Roman remains extend up the base of *Gouraiia*, and medals and inscriptions are constantly found wherever excavations are made. The last monument discovered, near the Civil Hospital, is a mosaic of the head of Ocean, flanked by two Nereides on each side. It is rude in execution, and dates probably from about the 3rd century B.C.

It is said that this town gave its name to the French word for a candle, first made from wax exported hence.

There can be little doubt that Bougie is destined to become one of the most important cities on the littoral. Not only is it the natural port of Kabylia, but also of the rich plains of Setif and Aumale. Very little labour is required to make the harbour perfectly secure, and in a military point of view it is strong and capable of easy defence.

There are several excursions from Bougie which the traveller should on no account miss if he can possibly spare time to make them.

(1.) To the **Lighthouse on Cape Carbon**, distant about 6 kil. A good part of this can be done by carriage. A very easy road leads from the town along the flank of the mountain east of *Gouraiia*, through the Valley of Monkeys, the southern slope of which is well wooded with karoub, olive, and oak trees; it then traverses the mountain by means of a tunnel, and passes over the pointed crest of the isthmus connecting the peninsula of Cape Carbon with the mainland. The northern face of the mountain is much more sterile, but covered in many places with scrub, the only trees being Aleppo pine. Nothing can exceed the sublimity of the landscape from every point of view. In front is the open sea, to the W. the

littoral richly festooned with bays, capes, and promontories, and to the E. the majestic mountains of Kabylia.

(2.) To the top of **Gouraiia**, from which a magnificent view is obtained; there is a good road up, and the ascent may be made on foot or by mule in an hour; the whole excursion need not occupy three hours. 4 f. are usually paid for mules for either excursion.

(3.) To **Toudja**, 30 kil. Carriageroad. A Kabyle village situated amongst splendid orange groves, the sole wealth of the people. The road branches off from the railway station of Réunion.

(4.) A boat excursion may be made through the natural arch below Cape Carbon to some **stalactitic** caves a few kilometres to the W. They can only be entered in fine weather, and are full of pigeons.

[There is direct railway communication between Bougie and Beni-Mansour, on the line of railway from Algiers to Constantine. The traveller can reach **Aumale** by this route.

From Bougie there is a route and a service of diligences to Setif, through the Chabet el-Akhira, every day. See p. 210.]

The steamer continues its course across the Gulf of Bougie to **Cape Cavallo**. About half way, at a place called *Ziama*, are the ruins of the fortified Roman town of that name. A short distance farther, seen on the right, is the rocky promontory of *Mansouria*, beyond which is Cape Cavallo. Near this is a mine of argentiferous lead ore, and the hills around are full of iron and carbonate of copper.

Between this and Djidjelly is a small island of a bright red colour, called by the Arabs *El-Afia*.

In front of the latter town is a line of rocks, on one of which stands the lighthouse.

140 m. **Djidjelly** (pop. 5829) is situated in a little bay, the entrance to which faces the S.E., formed by a

line of reefs which seems to have been placed there to serve as the foundation of a breakwater. It does not, however, shelter the anchorage from N.W. to N.E., as it has several openings, one of which forms a pass 100 mètres wide and 10 deep. At the extremity of this is Cape Bougiarone, which affords some shelter from the E.N.E.

This is the natural outlet of a country rich in vegetable and mineral productions, extending up the valley of the Oued el-Kebir as far as Mila. It occupies the site of the ancient Roman colony of *Igilgilis*, which was a place of considerable commercial importance. During the Vandal invasion it shared the fate of other towns in the country.

After the Khalifas of the East had subdued Northern Africa, it passed under the Arab rule as a dependency of Constantine, and Yahia ibn el-Aziz built a summer residence there. This, as well as the town, was destroyed by the Sicilians, commanded by Roger II. in 1143. The ruins of this château are still visible on the *Plateau Galbois*. In the 16th century it had extensive commercial relations with Marseilles, Genoa, Leghorn, and Venice. In 1514 it surrendered to Barbarossa, who made it a port of refuge and repair for his piratical expeditions. In 1664 Louis XIV., desiring to found there a military establishment for the purpose of holding the pirates in check, sent an expedition under the command of the Duc de Beaufort to take possession of it. The land forces, consisting of 5200 regular troops, including a battalion of the knights of Malta, were under the immediate command of the Comte de Gadagne; he was further reinforced by 200 volunteers and 20 companies of marines, in all about 6000 men. The fleet consisted of 15 frigates, 19 galleys, and 20 smaller vessels.

The army landed on the 22nd July 1664, occupied the town, and began to construct Fort Duquesne, to defend it against the Kabyles. Soon, however, a Turkish force arrived from Algiers with a powerful artillery. The Duc de Beaufort, who was on bad terms with the military commander, had left for

Tunis, and the position of the French became very critical, and eventually untenable. Comte de Gadagne, seeing his troops demoralised, ordered them to embark, leaving behind not only his sick but the corps detailed to cover his retreat. Many of the soldiers were massacred, and the remainder carried off to slavery at Algiers.

This disastrous affair cost the French 1400 men, 45 guns, and 50 mortars, some of which guns were actually used against them in the insurrection of 1871. The Duc de Beaufort was subsequently killed in June 1669, in an unsuccessful attempt to raise the siege of Candia by the Turks. He was blown up by the explosion of a powder magazine, and his body was never recovered.

In 1803 an Arab from Morocco, named Bin-Arash, made Djidjelly the headquarters of his piratical expeditions, and captured 6 French coral fishing-ships and 54 prisoners, who were led chained to the town. In revenge, the Dey of Algiers sent 3 ships against Bin-Arash, who was known by the name of "the Pirate of Djidjelly."

In 1839 the Kabyles took prisoners the crew of a brig named *L'Indépendant*, wrecked near Djidjelly, and refused to give them up without ransom. In consequence of this the town was attacked and captured by Colonel de Salles in May of the same year. At that time all that remained of the mediæval town was a square tower and the wall which protected the isthmus: little or no Roman ruins were apparent.

The old town was built on the rocky peninsula forming the extreme W. point of the bay. On the night of the 21st and 22nd August 1856, a violent shock of earthquake, accompanied by a subterranean sound like thunder, was felt, and immediately a great proportion of the houses fell to the ground. The mosques, the old Genoese tower, and many others were destroyed. The sea retreated a great distance, and suddenly returned with immense fury: these disturbances lasted forty seconds. On the following day another and more

violent shock took place, accompanied by detonations and deep fissures in the earth, and dense clouds of dust; when the shock terminated, not a house remained standing. During a whole year the shocks continued almost daily till they gradually ceased.

The old city was restored as a citadel, containing only military buildings. A new town has been built on the shore of the bay to the E., surrounded by a wall and ditch, which enabled its small garrison successfully to support a siege of several weeks in 1871.

A route between Djidjelly and Constantine, by Mila, was finished in 1890, which will open out a field for colonisation in a district where the quality of the land, the abundance of water, and the proximity of forests and mines, cannot fail to secure the prosperity of the projected villages.

[Djidjelly is perhaps the best point from which to attempt the **Ascent of Babor and Ta-babort**. The journey has no physical difficulties, but it will be found hardly practicable without the co-operation of the local authorities. The author performed it in March 1878, but it ought not to be attempted before May, on account of the snow on the summit of the mountains, and the difficulty of passing the rivers which take their rise in it.

The first night he passed at the lead mines of Cape Cavallo, since abandoned; the distance from Djidjelly to this point is about 35 kil., and occupied $4\frac{1}{2}$ hours on horseback. The second day he proceeded by a very difficult path along the coast, visiting the picturesque cave of *Oued Taza* and the ruins of *Ziama*, and sleeping at *Ain-Bou M'raou*, the residence of the Kaid of Ta-babort. The journey took 9 hours. Thence, on the third day, after a ride of 8 hours, he reached the village of *Beni Bizaz*, beautifully situated in an elevated valley between the peaks of Babor and Ta-babort; the scenery throughout was extremely beautiful and interesting in many respects. On the summit of the mountains are forests of cedar and

African pinsapo, which latter has been described as a distinct species under the name of *Abies baborensis* of Cosson, a near ally of the *A. pinsapo*, which is confined to the Iberian peninsula. If the traveller cannot ascend Babor, he will see both the Atlantic and the Spanish varieties growing in juxtaposition in the plantation of *Jebel el-Wahash*, near Constantine (see p. 208). The most easy and the most picturesque route by which to return to Djidjelly is through the beautifully wooded country of the *Beni Foughal*, the only tribe in Eastern Kabylia which remained faithful to the French in 1871. During the author's visit the trees were not yet in leaf, but the whole country was carpeted with violets, periwinkle, and blue irises.]

Beyond Djidjelly the embouchure of the *Oued el-Kebir* is passed; this, higher up, is the *Roummel* of Constantine, the Roman *Ampsagas*, a river celebrated in the history of the ancient territorial demarcations of the country; and farther on is Cape Bougiarone (*Dj. Bou Garoun* or *Bou Koroum*, Mountain of Horns, or *Djebel Sebäa Raos*, Mountain of Seven Capes). There can be little doubt of the Arabic origin of the former name, and that Shaw was in error when he described it as a term of reproach on account of the brutal and inhuman qualities of its inhabitants. He says of them: "They dwell not, like the other Kabyles, in little thatched hovels under the shelter of some forest or mountain, but in the caves of the rocks, which they have either dug themselves or found ready-made to their hands. Upon the approach of any vessel, either in the course of sailing or distress of weather, these inhospitable Kabyles immediately issue out of their holes, and, covering the cliffs of the sea-shore with their multitudes, throw out a thousand execrable wishes that God would deliver it into their hands."

This cape is the most northerly point of Algeria, and rises in the centre to a height of 3600 feet above the sea-level. It is the *Treton* of

Strabo and Ptolemy, and the *Metagontium Prom.* of Pomponius Mela.

At *Bougiarone* there is a fixed white light of the first order on a masonry tower, visible from a distance of 20 m. There is another at *Cape Afia*, nearer to Djidjelly, which has a flashing light 138 feet above the sea, and is seen 19 m. in clear weather.

The coast is bordered by masses of rock to the N. and N.W., but to the E. the cliffs are lower. Passing this, and also the point called *Ras-el-Kebir*, the *Bay of Collo* is reached, at the commencement of which is

188 m. **Collo** (pop. 1748).

The bay which serves as the harbour of Collo is protected from all the most dangerous winds, and offers not only a safe refuge for vessels trading on the coast, but a tolerably convenient landing-place for merchandise.

Behind the promontory of *El-Djerda* is another bay, called by the natives *Bahr en-Nissa*, the Sea of Women, so called from a spring named *Ain-Doula*, Fountain of Wealth, believed by them to be valuable in cases of sterility.

An inscription found here, bearing the legend *COLONIA MINERVÆ CHVLLV*, proves beyond doubt that it was the *Kollops Magnus* of Ptolemy and the *Chulli Municipium* of the itinerary of Antonine. It was a city of considerable importance during the Roman epoch, and its harbour was a frequent station of the imperial galleys.

It was here that Peter III. of Aragon debarked in 1282 for the purpose of conducting in person an expedition for the conquest of Constantine; but when he heard of the death of his ally, Aboo-Bekr Ibn Wuzir, governor of that city, he left for Sicily. From 1604 till 1685 the French *Compagnie d'Afrique* had an establishment here.

The place was occupied by General Baraguay d'Hilliers in April 1843.

The environs are very picturesque. Towards the S. is a fertile cultivated plain, in the centre of which rises a cone-shaped wooded mountain, called *Roumadia*.

The streams near Collo are the only

ones in Algeria where trout are found; the species (see p. 74) is peculiar to the *Oued Z'hour* and its affluents.

[From Collo there is a good road joining the railway from Philippeville to Constantine at Robertville—57 kil. in length. It passes through beautiful forest scenery, but there is not a trace of colonisation.

At 28 kil. from Collo a road crosses it; the left branch goes to **Philippeville**, the right one to **El-Milla**, 41 kil. distant. At the junction is the caravanserai of *Tamalou*.]

A lighthouse with an intermittent green light is placed on the promontory of *El-Djerda*; and there is a fixed red light at the entrance of the port.

In about three hours' steaming after leaving Collo, the boat passes between the island of *Srigina*, on which stands a lighthouse, and the coast, distant about $\frac{1}{2}$ m., and passes **Stora**, a small, prettily-situated village, the inhabitants of which are principally engaged in curing sardines. For many years this was the regular station of the coasting steamers, as a bend in the coast gave some shelter from the most dangerous winds, except in unusually heavy weather, when it was imprudent even to approach the coast.

206 m. **Philippeville**. Pop. 15,788.

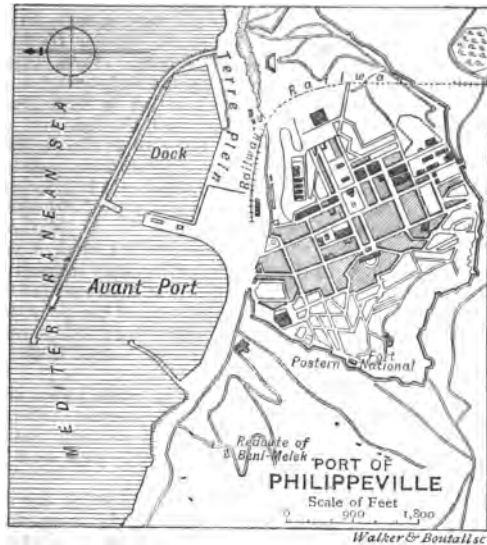
A magnificent harbour was completed in 1882; it is formed by the projection in a W.N.W. direction from Cape Skikdah, immediately to the E. of the town, of a grand mole or breakwater, 1400 metres long, and by the projection in a N. direction, from Chateau Vert, W. of the town, of a mole of *pierres perdues* about 400 metres long; the width of the entrance will be about 200 metres, and it will have a lighthouse at the head of the grand mole. The area thus protected is divided into an outer and inner basin; the former varies in depth from 8 to 19 fathoms; the inner basin has a depth varying from 22 to 50 feet.

It is contemplated to increase this harbour to a very great extent, and, if

the proposed works are carried out, it will have a surface of upwards of 1200 acres, effectually sheltered from all winds. During the great storm of 26th and 27th January 1878 nearly the whole of the harbour works were carried away, and every vessel in the harbour was wrecked. The whole has been reconstructed, and the breakwater widened to 30 mètres at the water-line; it is crowned with a parapet 5 mètres thick, and 13 mètres above the level of the sea. Vessels are able to

lie alongside the quays, which are all revetted with large blocks of white marble from the quarries of Filfila.

There is very little to be said about the modern town of Philippeville, which is picturesquely situated between two hills, and built and fortified according to the common type of Algerian cities. It owes its existence to the necessity which arose, after the taking of Constantine, of having a more direct means of communication with that city than by Bône. On the 7th October



1838 Marshal Valée encamped on the site of the ancient city of Rusicada, and purchased it from the Beni Meleh for 150 f.

The Roman city was built on the site of a more ancient Phœnician one, the *Tapsus* mentioned by Scylax in his Periplus, whence is derived the modern name *Safsaf*, applied to the river which here falls into the sea.

It soon attained a high state of prosperity, and, with Cirta, Collo, and Mila, formed one of the four colonies of the Cirtensians. No city of Numidia with so small an area has furnished

such a mass of archaeological treasures. Many of these have disappeared, but all that remain are now carefully preserved in the ancient theatre, itself the most interesting ruin in the place.

An amphitheatre in a very perfect state of preservation existed outside the present gate of Constantine when the place was occupied, but its stones were taken away for building purposes, and the railway destroyed the last vestige of it.

On the plateau above are the ancient reservoirs, which were filled by a canal, bringing in the waters of the *Oued*

Beni Meleh. These have been carefully restored, and still serve to supply the modern town.

The ancient baths were in the centre of the town, to the left of the Rue Nationale, and are still used as cellars to the military stores.

Rusicada was probably destroyed about the end of the 5th century, after which it disappeared from history, and its very name was forgotten. During the Middle Ages Stora seems to have usurped the place of Rusicada, as affording more shelter to the vessels trading with North Africa; but these, dreading the treacherous character of the coast, remained the shortest time possible, and preferred the greater security of Collo or Bougie to the W., or Bône to the E.

The traveller should visit the beautiful *villa and gardens of Count London*, at the Safsaf, called the *Domaine des Lions*; they are most hospitably left open for the public when he does not happen to be present.

A drive may be taken to STORA (4 kil.); the road is luxuriantly wooded with cistus, myrtle, arbutus, and heath, and commands splendid views of woods, rocks, and water.

Leaving Philippeville, the steamer directs her course towards the Cap de Fer, passing a small promontory of *Cap Filfila*, a continuation of the *Djebel Filfila*, where are *iron mines* on one side of the Oued Righa, and on the other the fine *marble quarries* belonging to M. Lesueur; they contain marble of a variety of colours, chiefly white, gray, and black. The distance by road to the quarries is 25 kil. About 15 kil. E. of Filfila is BOU KSAIBA, where other deposits of marble, principally yellow, are found. Beyond this is the embouchure of the river *Sanedja*, and near it are the copper mines of *Aïn-Barbar*, formerly belonging to an English company, now unworked (see p. 127).

The *Cap de Fer* or *Ras el Hadid* is a jagged, rocky point, projecting so far into the sea as to have the appearance of an island when seen from Philippeville. The highest peak is 1500 feet above the sea-level. Its

name has been given to it from its iron mines, which were formerly extensively worked. The N. side presents a wall of rock towards the sea. On it is a light of the third order, alternately flashing red and white every thirty seconds. Shortly after passing the point, the *Koubba of Sidi Akkach* is seen above a small bay. The next headland is called *Ras Takouch*, which affords a shelter for small vessels; it was frequented by the Italian merchants in the 14th century. A rock, the *Ile Takouch*, stands out a mile from the shore. A small village, *Herbillon*, has been built here. From this the coast is steep and rock-bound as far as a conical rock called *la Voile Noire*, projecting $\frac{1}{2}$ m. into the sea.

The *Cap de Garde*, like the Cap de Fer, appears from a distance almost as an island. It is a prolongation of the range of *Djebel Edough*, and is surmounted by a lighthouse, 469 feet above the sea, with a *fixed and flashing* white light eclipsed every minute, visible at a distance of 81 m. On the other side of the point is Fort Génôis, after passing which the steamer anchors in the harbour of Bône.

264 m. **Bône.** Pop. 30,052. Seat of a Sous-prefecture, tribunal of premier instance, general commanding the subdivision, civil and military hospital, etc.

It is called by the Arabs *Annaba* (city of Jujube trees), and was founded by them after the destruction of Hippone.

The Kasba was erected by the Bey of Tunis in 1300; and from this time until the middle of the 15th century Bône was the resort of Italian and Spanish merchants, who carried on an extensive commerce with North Africa.

In 1553 Kheir-ed-din, then Pasha of Algiers, sent a force to garrison the town; but they evacuated it after Charles V. had taken possession of Tunis; for some time after it was constantly changing hands, the Genoese, Tunisians, and Turks all obtaining possession of it in turn.

In 1830, after the taking of Algiers,



PORT OF BONE

Walker & Bondall & Co.

the inhabitants threw off the yoke of the Bey of Constantine, and at their request the place was occupied by a brigade of French troops, but soon after, the change of government in France necessitated the concentration of all the available forces at Algiers, and Bône was evacuated. The French finally occupied it in 1832, when Captains Armandy and Yousouf, with a few soldiers, entered the Kasba, and succeeded in defending it against heavy odds until succour arrived.

It is a cheerful, clean, and well-built town. Much of the old part has been destroyed, but some portion, including the Kasba, still remains. The streets are for the most part straight and wide, although some, such as the *Rues Fréart, Philippe, and Suffren*, are very steep, owing to the town being built on uneven ground. The best shops are in the *Rue Neuve St. Augustin*, and *Cours Nationale*. Amongst the principal squares is the *Place d'Armes*, which is planted with rows of trees, and has a garden with a fountain in the centre. The Grand Mosque occupies one side, and on the other there are houses and shops, all with arcades. The *Places du Commerce* and *Rovigo* are both ornamented with trees and fountains.

Through the centre of the town, from the cathedral to the harbour, runs the *Cours Nationale*, a delightful promenade, planted with trees and flowers. On each side are the principal buildings of the place, *Theatre*, banks, hotel, etc. At the end nearest the sea is a statue of M. Thiers, and at the opposite one is the Cathedral of St. Augustine, a building supposed to be in the Byzantine style of architecture; the façade only is very conspicuous, and this is the least objectionable part of the structure.

The *Mosque, Jamâa-el-Bey*, in the *Place d'Armes*, has been constructed out of some of the ruins of Hippone. The exterior is in good taste; the interior is merely a repetition of all other mosques described.

The *Barracks*, capable of holding 3000 men, are two in number—one in the *Rue d'Orléans*, and the other near

the *Porte Dammémont*. There is a large *Military Hospital* for 700 patients in the *Rue d'Armandy*, and a civil hospital capable of holding 350.

The town is plentifully supplied with good water from *Djebel Edough*. The climate was formerly exceedingly unhealthy, owing to the marshes at the embouchure of the two rivers *Seybouse* and *Bou Djemâa*, which enter the sea close together; now these have been drained by a chain of canals, and malaria has almost disappeared.

A short distance from the town is a *épinière* belonging to Government, in which are deposited a marble sarcophagus and some other interesting Roman remains, worthy of a visit.

Formerly the anchorage in the bay was very insecure, but in 1868, after more than ten years' labour, the new harbour was finished, and is now as good as any in the colony, not excepting that of Algiers itself. It consists of an outer harbour, having an area of 150 acres, formed by two breakwaters, leaving between them an aperture of about 300 yards; within this is a basin containing 30 acres, surrounded with handsome quays, alongside which vessels can load in any weather. A still further extension of the harbour is being carried out, which will best be seen by the dotted lines on the plan.

EXCURSIONS IN THE NEIGHBOURHOOD.

Naturally the first excursion that the traveller desires to make is to the spot hallowed by the labours and death of St. Augustine.

The ancient Carthaginian *Ubbo* or *Hippone* received from the Romans the name of *Hippo Regius*, not only to distinguish it from the *Hippo Diarrhytus*, but from being one of the Royal cities of the Numidian kings; it was created a colony of the Empire; and was one of the most opulent commercial centres of Roman Africa.

St. Augustine, who had been converted four years before, was ordained priest here A.D. 390; here he resided, a priest and bishop, for thirty-five

years; and here also he wrote his *Confessions* and his *City of God*.

In A.D. 428 the intrigues of the ambitious Count Boniface opened to the Vandals the door of the African continent, and Hippone was besieged by them for fourteen months. St. Augustine died during this time, and in 431 the city fell, and its conquerors reduced it to ashes, all but the cathedral, which escaped, together with St. Augustine's library and MSS. The town, which was partially rebuilt under Belisarius, was again destroyed by the Arabs in the year 697.

St. Augustine was buried in the Basilica of Hippone. After the persecution of the Vandals had driven many of his disciples into exile, two of the last bishops are said to have carried off his relics with them and deposited them in the Basilica of Cagliari, where they remained for 223 years; they were then translated to Pavia, and there they repose at the present moment in a magnificent monument in the cathedral.

In 1842 the reliquary was opened, and the right arm of the saint abstracted for the purpose of being conveyed to Bône; it was taken over to Africa with great solemnity and deposited in the cathedral there.

An altar had been previously erected to his memory amongst the ruins of Hippone, surmounted by a bronze statue; this was at the same time solemnly consecrated, and a religious service has been celebrated there every year on the anniversary of his death. It is surrounded by an iron railing, but this has not protected it from the sacrilegious penknives of tourists, whose names cover every available spot in and around it.

Just below is the only remnant of Hippone now existing, the cisterns and aqueduct which supplied the town with water from *Edough*. These have been restored in the most ruthless manner by the *Ponts et Chaussées*, and now serve to supply the modern town of Bône; the last trace is thus obliterated of the venerable city of St. Augustine.

Above is a large basilica dedicated to the saint, with fine columns of Corsican marble. A peculiarity of this building is that the chancel is in the W., and the opposite door faces the E. Behind the building is a hospice for poor and aged people, kept by the *Petites Sœurs des Pauvres*.

Another pleasant drive is along the **Corniche Road** to **Fort Géois** (9 kil.)

This road was only made in 1885; it skirts the shore of the outer harbour, passes the Arab cemetery and the Plage Luquin, where are numerous villas and a bathing establishment, and here it joins the old road to the fort. There are beautiful views of land and water at every turn. Fort Géois was built by the Genoese after their occupation of Tabarca, to protect their ships when obliged to anchor in the bay. Three kilomètres farther off is the extremity of *Cap de Garde*.

ASCENT OF DJEBEL EDOUGH.

By far the most interesting expedition in the neighbourhood of Bône is the excursion through the Forest of **Edough**. The road is quite practicable for carriages, but it is much more pleasant to do it on horseback.

This mountain is the celebrated Mons Papua, where took place some of the most celebrated events in the history of North Africa.

When the Vandal King Genseric laid siege to Hippone, during the year in which St. Augustine died, the inhabitants of this mountain witnessed from their natural fastnesses the extinction of Roman power in Africa. A century later Belisarius reconquered the country, and Glimmer, the last of the Vandal monarchs, fleeing before him, took refuge in these mountains, whence, before his surrender, he sent the well-known message to his conqueror, requesting that he might be supplied with a lyre, a loaf of bread, and a sponge. On being questioned as to the meaning of this strange request, the messenger replied that his master wished once

more to taste the food of civilised people, from which he had been so long debarred, to sing to the accompaniment of the lyre an ode to his great misfortune, and with the sponge to wipe away his tears.

In the neighbouring port of Hippo was captured the great treasure of the Vandals: "Silver weighing many thousand talents, and a huge mass of royal furniture (Genseric having sacked the palace at Rome), amongst which were some monuments of the Jews brought to Rome by Titus after the destruction of Jerusalem. Subsequently, at the triumph of Belisarius in Constantinople, a Jew espying the same, standing by one of the emperor's familiar friends—'It is not good,' quoth he, 'to bring these monuments into the palace, for they cannot continue but where Solomon first put them. Hence it is that Genseric sacked the palace in Rome, and now Belisarius that of the Vandals.' The emperor, hearing this, sent them to the Christian church in Jerusalem."¹

For several years after the French occupation of Bône, Edough maintained a sort of independence; its inhabitants avoided all intercourse with the conquerors, and abstained from all acts of aggression.

In 1841, however, a Marabout, who lived near the Cap de Fer, imagined that Providence had called him to become the liberator of his country, and, as then was always the case, the moment a fanatic began to preach the Jihad or holy war, he was surrounded by a host of followers as ignorant and fanatic as himself.

Several acts of hostility and brigandage were perpetrated, which could no longer be tolerated, and a force was sent to pacify Edough, under the command of General Baraguay d'Hilliers. Three columns ascended the mountain simultaneously, from Constantine, Philippeville, and Bône, and compelled the tribes to recognise the authority of the French. For a time, however, the Marabout Si Zerdoud continued at

liberty, and urged his followers to resistance. The advancing columns drove the hostile Arabs on to a small promontory occupied by the Koubba of Sidi Akkach, between Cap de Fer and Ras Takouch, when, seeing that all further resistance was hopeless, they demanded *aman*. This was at once accorded, but while the negotiations were going on a shot from the thicket behind wounded an orderly of the General, who immediately gave the order for a general massacre. Many of the Arabs threw themselves into the sea and were drowned, the rest were slaughtered without pity.

Si Zerdoud escaped at the time, but was captured shortly afterwards, and immediately shot.

The road ascends the southern side of the mountain, which is at first rather bare, and covered with tufts of *diss* grass, but very soon cork oaks begin to appear, and long before reaching the culminating point the road traverses a thick forest of these trees and deciduous oak (*Quercus Mirbeckii*).

On the top of the hill, 3294 feet above the level of the sea, is the village of Bugeaud, created in 1843, and named after the well-known Maréchal. It is situated in a clearing, from which there is a magnificent panoramic view of the sea on one side, and of the bay and plain of Bône on the other, bounded by the mountains of the Beni Saleh.

The winter at Bugeaud is severe, but in summer it has quite an European climate, and is a favourite sanitarium for the good people of Bône, who cannot all manage to get away to France during the hottest months. A few villas have been built in the village and in its vicinity.

About a mile farther on is the village of Edough, composed almost entirely of buildings connected with the cork establishment of Messrs. Lecoq and Berthon, who have a concession of 8000 hectares of forest land. There is a comfortable *auberge* here, where an excellent breakfast can be obtained.

Instead of continuing along the

¹ Procop. *Wars of Vandals*, trans. Sir H. Holcroft, book ii. c. 6.

high road, the traveller should turn off to the right, and follow a path, which has been made in connection with the aqueduct that conveys the waters of the Fontaine des Princes to Bône. At the head of the valley is a charming retreat, where the sirocco never seems to find its way; if we were inclined to disbelieve the people who said so, we have only to look at the trees themselves, covered with moss and polypodium, and to the great variety of ferns which line the roadside and peep out of mossy nooks and springs. Truly it is a princely spring, and deserves such a name on its own merits; but the Orleans princes once picnicked here before the days of the Second Empire, and the fact has been perpetuated by the present name.

An abundant and perennial stream flows down this valley, part of which has been diverted and carried in iron pipes for the supply of Bône. The ancient city of Hippo was supplied from the same source, and the Roman bridge still exists which carried the water across the ravine. It is covered with ferns and wild flowers, and a venerable oak tree grows from the very centre of it. The under-shrub here consists chiefly of tree-heath, myrtle, and arbutus; the wild cherries almost attain the size of forest trees, while the ground is a perfect carpet of flowers and creepers.

The first impression that naturally occurs to the traveller here is, that, though the whole country is an alternation of forest land and grassy slopes, there is not a sign of habitation; yet it is impossible to conceive a locality better suited for colonisation, especially for the growth of vines, one of the staple productions of Algeria.

The mines of Ain-Barbar are situated at about 25 m. from Bône. The principal mineral is sulphide of copper, or copper pyrites, together with sulphide of zinc or blende. Small quantities of argentiferous lead ore have also been found. The work at these mines has been discontinued.

There is a bridge path by which a traveller can descend to the iron

mines of Ain-Mokra, and so by railway to Bône; but the road through the forest is so beautiful that he will generally be only too glad to return by the way he came. A few lions still remain in the neighbourhood, and have been seen within a mile or two of Bône; panthers are more common, but the numbers of both are decreasing very sensibly every year.

EXCURSION TO THE IRON MINE OF AIN-MOKRA.

A railway, belonging to the mines, but open to the public, connects Bône with the iron mines of *Ain-Mokra* or *Mockta el-Hadid*. The distance is 40 kil. and the time occupied about two hours.

This mine was at one time simply a mountain of iron, which was blasted and carried off to Bône for shipment; now nearly all the mineral above the surface of the ground has been exhausted, and the veins, running in a slanting direction through the mica schist, are being worked by means of galleries. The palmy days of the mine are over, and the company has transferred its activity in a great measure to Beni Saf. The ore contains 64 per cent of pure metal.

To the S. may be seen the *Lake Fexara*, a large sheet of water about 12 m. square, frequented by numbers of wild fowl. A concession was made of the ground covered by this lake to the Company of Ain-Mokra, on the condition that they drained it effectually, and planted a "sanitary cordon" of eucalyptus to the extent of 2000 hectares (5000 acres) around it. The work was commenced in 1877, a canal 15,729 metres long was cut from the bottom of the lake to divert the water into the *Meboudja*, and thence to the *Seybouse*; the lake was really emptied on the 5th August 1880, but after every year of exceptional rain its basin becomes refilled.

It was found impossible to grow eucalyptus, as the moment the roots of that tree touch earth impregnated with salt they die. So far, therefore,

the drainage of the lake may be pronounced a failure.

[From Bône the traveller can proceed to Constantine, either by railway *vid* Guelma, or by diligence to St. Charles, and thence by the railway running from Philippeville. The first part of the latter route is through a wild and hilly country; at 68 kil. from Bône and 91 from Philippeville it passes through **Jemmapes**, a flourishing village, near which, at *Oued Amimin*, are some hot sulphureous springs, much esteemed for the cure of rheumatic and cutaneous affections.]

Beyond Bône the coast curves round towards the N.E. to Cap Rosa, 52 miles E. of Cap de Garde. The rivers Seybouse and Boudjema both enter the sea close to Bône, and between them the small hill, whereon stands Hippone, may be seen. The shore hereabouts is very flat, and to the S. lies an immense plain, extending inland for many miles. About 30 kil. before reaching Cap Rosa, the river Mafrag discharges itself into the sea. Here the coast is more hilly, and is richly wooded.

Cap Rosa or *Ras Bou-Fhal* (288 m.) rises to an elevation of only about 300 feet above the water, although the hills more inland have nearly four times that altitude. This was the *Ad Dianam* of the itinerary of Antoninus. It had a temple dedicated to that goddess, of which some vestiges were at one time visible. This has now been more usefully replaced by a lighthouse with a fixed white light, seen at a distance of 12 m. Beyond is a creek which communicates with the salt lake *Guera-el-melah*.

The ruins of the Bastion de France, where the French-African Company had its residence before removing to La Calle, are seen farther on, and after passing the small point of Cap Gros, the steamer arrives at La Calle.

298 m. **La Calle**. Pop. 5505.

The mail steamer stops on its way to Tunis when the weather permits, but the traveller should be careful to

ascertain before starting whether the vessel will touch.

A small town, 15 kil. from the frontier of Tunis, the principal industry of which is the coral fishery; indeed, it is mentioned as being inhabited by coral merchants in the year 960. The sale of this article was regulated by officers appointed for the purpose. In 1520 the exclusive privilege of fishing the coral was granted to France by a treaty which was maintained until 1560, and was renewed shortly afterwards, and again dissolved in 1679. About this time a company was formed under the name of the "Compagnie d'Afrique," which obtained the sole right to the fishery. At first the French established themselves in a little bay to the W. of La Calle, which they named *Bastion de France*; but in 1677 they were obliged to abandon it and establish themselves at La Calle, then a flourishing town, called by the natives *Bordj el-Kala*. The Company was suppressed in 1798, when the Porte ordered the Barbary States to declare war against France. In 1807 the Dey of Algiers let the coral fishery to the English for a term of ten years, at an annual rent of 267,000 f. The French regained possession of it in 1817, at which time La Calle was burnt by the Arabs. In 1822 a M. Paret, of Marseilles, bought the fishery for eight years, and carried it on by means of 240 boats. In 1827 war broke out between Algiers and France, when La Calle was again destroyed.

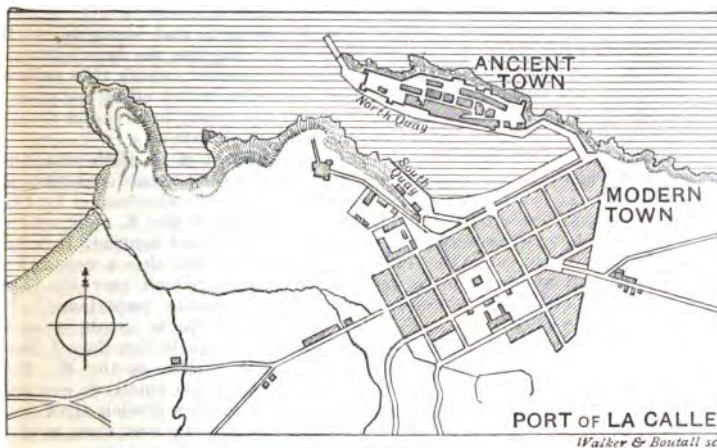
Shortly after the capture of Bône the French determined to renew their commercial relations with the tribes around La Calle, and to provide once more a harbour of refuge for the boats engaged in the coral fishery. In the month of May 1836 Yousouf, who had recently been named Bey of Constantine, made a reconnaissance of it, and on the 14th of July following Captain Berthier de Sauvigny took possession of it without resistance. It was found exactly in the condition in which it had been left after its destruction by fire on the 27th June 1827. A few houses were still habit-

able, or easily rendered so. That now occupied by the Commandant Supérieur has hardly undergone any change; the church is old, but has been restored.

An interesting picture of life at La Calle is given by the Abbé Poiret, who travelled in Barbary from 1785 to 1786.

When he landed, the country round was being devastated by the plague, and the *comptoir* of the French jealously barricaded its gates to prevent all communication with the interior. The Arabs, irritated and jealous at seeing the Christians exempt from a

disease which was committing such cruel ravages amongst themselves, tried by every means in their power to introduce the contagion. They buried plague-stricken corpses at the gates of La Calle, they threw rags saturated with virus over the walls, and, independently of these secret attacks, continued and open state of hostility seemed to prevail. La Calle was governed by an agent having the title of governor, with about fifteen other officers under his direction. The Arab were excluded from the place, with the exception of a few who were



retained as hostages, or who were employed in manual labour. The inhabitants were from 300 to 400, mostly Corsicans and natives of Provence. Some were employed in the coral fishery; others, nominally soldiers, were occupied in guarding the cattle when taken outside for pasture. Sometimes these same soldiers, in the guise of carters, were sent to the neighbouring forests to cut wood. Others, called *frégataires*, were occupied in loading vessels, transporting corn, cleaning the port, and similar works, and there was in addition a staff of bakers, blacksmiths, masons, and other artificers. All these employés were paid, fed,

and lodged by the Company; but the fair sex was rigorously excluded. I sometimes the Governor was permitted to bring his wife, serious troubles were sure to result, and he was rarely able to keep her there for any length of time.

The climate was then exceedingly unhealthy. Violent fevers were of constant occurrence, which carried off their victims in four days, and the mortality amongst the employés was immense.

These were people of the worst character, as the Company received indiscriminately all applicants, without asking any questions. Most of

them were convicts who had escaped from justice in France, men lost through libertinage and debauch, without principles of religion, or the least sentiment of probity.

At La Calle it was only the worst crimes of which any cognisance was taken; all others were allowed to go without punishment, as the Governor had only the shadow of authority, and it was necessary to humour this nest of ruffians always ripe for revolt. In addition to the heavy taxes paid directly to the State, the Company was subjected to indirect taxation to an enormous extent, and was subjected to the most humiliating restrictions. It was compelled to feed all the Arabs who chose to present themselves. If an Arab killed a Christian he was liable to a fine of 300 piastres as blood money, which was never paid; but in the event of a Christian killing an Arab, he was forced to pay 500 piastres, which sum was exacted to the last farthing. The Company was not permitted to appoint its own interpreters; these were always named by the State, and the only qualification that appeared to be required was sufficient sagacity to enable him to betray the Christian.

In 1807 Mr. Blanckley, the British Consul-General at Algiers, contracted with the Dey for the possession of Bône and La Calle,¹ which had been a century and a half in the hands of the French, whose contract had expired. 50,000 dollars, or £11,000, was the sum agreed on as an annual rent. This was actually paid for some years, without any result following, saving that of keeping out the French for a time.

The fishery was till lately almost entirely in the hands of Italian sailors, who came to fish on the coast, making La Calle their headquarters, and returned every year to their native country. There were as many as 230 boats engaged in the fishing. The banks are, however, becoming exhausted, and as there is no desire to encourage foreign enterprise in

¹ A facsimile of this document is given in *The Scourge of Christendom*.

Algeria, an annual tax of 400 francs is levied on every Italian boat engaged, and one of 800 francs on boats of other nations. The consequence is that all foreign vessels are driven out of the market, and only about 60 small French boats are now engaged in the fishery; their crews are still mostly Italians.

The ordinary mode of dredging is the same as that followed from the earliest times. A cross of wood, to each extremity of which small bags are attached, is lowered on to the bed of coral by means of a stone fastened to its centre. The line from the cross is attached to the boat, which is then rowed backwards and forwards in all directions, dragging the bags horizontally over the bed, which thus collect the fragments broken off by the stone. Some of the boats have begun to use the diving apparatus.

The old town of La Calle was contained within the present fortifications, on a ridge of rocks surrounded by the sea, excepting on the E. side, where an isthmus of sand connects it with the mainland. On this a new town has sprung up, which year by year is attaining greater importance. It was contemplated to create a new harbour of refuge in the Bay of Bou Liffa, a little farther to the W., the old port being too small to contain vessels of a greater burden than 100 tons. A beginning was even made, and more than 400,000 francs were expended without any tangible result; now that scheme has been abandoned, and it is proposed to shut up the present entrance to the harbour, which is exposed to the prevailing winds, and to open another on the E. side of the town.

In the vicinity are three large lakes, of which one, *Guerah el-Melah*, is situated south of the ruins of the Bastion de France; the second is *Guerah el-Oubeira*, a little to the west of the town; and the third is somewhat to the east of it, and is called *Guerah el-Hout*, or Lake of Fish; the last two contain fresh water.

Around them are extensive forests

of cork trees, which furnish a large trade in that substance. Immediately surrounding the town, fruit trees, tobacco, and especially vines, are grown with success.

[A pleasant excursion may be made either by boat or on horseback (13 kil.) to the ruins of the **Bastion de France**, or *Veille Calle*, the first establishment formed by the French on the coast. On account of its insalubrity and the smallness of its harbour, it was abandoned in 1677, when the *Compagnie d'Afrique* transferred its establishment to *La Calle*. The ruins are still in a good state of preservation, and one can trace the outline of the fortified position, the vaulted rooms and casements, the church, mill, and several other buildings.]

About 12 kil. to the S.E. are the mines of **Kef oum-et-Teboul**, of argentiferous lead and zinc ores.

306½ m. At 8½ m. beyond *La Calle* is the headland known as *Cape Roux*, the eastern extremity of the colony of Algeria. It is composed of rocks of a reddish colour, scarped on every side. A large cutting may be noticed in the rock, from the summit, descending to the sea. Formerly vessels anchored here, and the old *Compagnie d'Afrique* used thus to bring down the cereals purchased from the Arabs. The remains of the storehouse built by that Company may still be observed.

315½ m. At about 9 m. E. of this cape is the Island of **Tabarca**, the history of which is most interesting. It lies close to the shore, the strait by which it is separated being about a quarter of a mile broad at the W. end, widening to nearly a mile at the eastern extremity. It has a small harbour, much frequented by coral boats when the weather is too rough to permit them to pursue their avocations at sea, and vessels of a larger size sometimes come under the shelter of the island to the E.

In ancient times *Tabaraca*, as it is usually called, or *Taberca*, the orthography found by the writer on a mili-

ary column at Chemtou, was a Roman colony; and after the defeat of Gildon, under whose yoke Africa had groaned for twelve years, by his brother Mascezel, the former endeavoured to effect his escape by sea, but being driven by contrary winds into the harbour of *Tabarca*, he was taken prisoner, and put an end to his life by hanging himself in A. D. 398 (p. 30).

It was a very important city of the African Church; the names of several of its bishops are recorded, and in 1883 an inscription was discovered commencing with the words *MEMORIA MARTVRVM*, together with several fine mosaics of the Christian period.

Several Roman roads radiated from this place—one to the valley of the *Medjerda* at *Simitu*, and others to *Hippo Diarrhytus* and *Hippo Regia*, which brought the produce of these rich districts to the sea for embarkation.

El-Edrisi (1154) speaks of it as a strong maritime place moderately peopled, and the environs of which are infested by miserable Arabs, who have no friends, and who protect none. It was even then a port of refuge much frequented by Spanish vessels engaged in the coral fishery.

In 1535 took place the celebrated expedition of Charles V. against Tunis. On the conclusion of peace the perpetual right of fishing for coral was conceded to the Spaniards.

About the same period *Jean Doria*, nephew of the celebrated *Andrea Doria*, captured on the coast of Corsica the no less celebrated Algerian corsair *Draguth*. On the partition of the spoil he fell to the share of one of the *Lomellini* family of Genoa, who exacted as the price of his ransom the cession of *Tabarca*. This was granted by *Kheir-ed-din*, and confirmed by the *Porte*.

The *Lomellini* came to an agreement with Charles V., who undertook the fortification and defence of the island, and built the citadel still existing, principally with the stones of the ancient city on the mainland. The Genoese agreed to pay 5 per cent on all the commerce which they made.

Soon, however, the Spaniards neglected to keep up the works or pay the garrison, and the flag of Genoa was substituted for that of Spain; and though the governor was still named by the latter power, he was obliged to render his accounts to the Lomellini.

The inhabitants of the mainland owned allegiance neither to the Bey of Tunis nor to the Dey of Algiers.

Peyssonnel visited it in 1724, when it was occupied by the Genoese. He describes in detail the fortifications armed with bronze cannon bearing the arms of Lomellini, which, he says, "make the island strong and sure, and in a condition neither to fear the Turks nor the Arabs of Barbary." It was inhabited by Genoese, and had a garrison of 100 soldiers, 350 coral fishers, 50 porters with their families, making a total population of 1500 men.

In 1728 the Lomellini family ceded the full sovereignty of the island to one of its members, Jacques de Lomellini, for 200,000 livres, and a branch of coral every year, valued at 50 piastres.

In 1741, during the war which Monsieur Gautier, the Consul of France, brought about between his country and Tunis, the latter took possession of the island. A part of the inhabitants, about 500 in number, effected their escape to La Calle, and thence proceeded to the island of San Pietro, to the S.W. of Sardinia, then uninhabited, where their descendants exist to the present day, under the name of Tabarcini, and still pursue the coral fishery, as well as aid in loading vessels arriving at their port of Carloforte for minerals.

The Tunisian historian, Haj Hamouda bin Abd el-Aziz, says that 900 men, women, and children, were taken as slaves to Tunis; their descendants still formed an intermediate population between the Christians from Europe and the native Moham-medans.

A portion of these were subsequently redeemed and sent to colonise the island called *Plana*, off Alicante, on the coast of Spain, to which they gave the name of Tabarca.

The island itself is 400 feet high, and its western side is crowned by the ruins of the fort built by Charles V.

The traveller should not fail to take a boat and row round the island. The grandeur of the rock and the castle are best seen from the sea.

On the mainland the Roman town covered a large area, the whole slope of the hill. The remains of many Roman buildings are still visible. One building appears to have been a palace, or public baths; it is called *Keskes* by the Arabs, and still contains several large vaulted halls in good preservation. There is a ruined church and fortified position behind the hotel, with a necropolis attached.

On the hill above is the *Bordj Djidid*, or new fort, built by the Tunisians; around it have been erected temporary barracks and other subsidiary buildings, sufficient for a large garrison, now, however, entirely withdrawn.

Close to the island may be seen the hull of the *Auvergne*, a large four-masted steamer belonging to the Talabot Company, which was driven ashore in 1878; the wreck was pillaged by the Khomair, and though none of the crew were actually killed, some of them were grossly ill-treated, and this was one of the indictments against them, which ended in the occupation of their country and of the whole regency by the French.

There is a practicable carriage road between Tabarca and La Calle, and another to Ain-Draham and Souk el-Arbâa.

The river which falls into the sea opposite Tabarca is the *Oued el-Kebir*, the Great River, or the *Oued ez-Zan*, River of Oak Trees, the ancient *Tusca*, which formed the boundary between the Roman province of Africa and Numidia. It is also called in some maps the *Oued Barbar*, probably on the authority of Marmol; but this name is quite unknown to the people of the country.

Stretching along the coast from Tabarca, nearly as far as Cape Negro, is a tract of country, in some places 15 kil. broad, called by the Arabs

Belad er-Ramel, Country of Sand, or *Ramel es-Safra*, the Yellow Sand. This has been engulfed by sea-sand, which is advancing imperceptibly but irresistibly in a S.E. direction, blown by the prevailing N.W. winds from the beach. There is no uncertain line of demarcation between it and the rich forest land beyond; it ends abruptly in a high bank, sometimes rising like a cliff 30 feet high, sometimes sloping gradually down a valley like a glacier, but always advancing and swallowing up vegetation in its course.

335½ m. Beyond this is Cap Negro, where the French founded a trading station before their settlement at the Bastion de France in 1609. It was subsequently taken by the Spaniards, and for a short time occupied by the English; but from 1686 till its destruction it belonged to the French. The principal trade consisted of cereals, wax, oil, and hides.

About 25 m. to the north is *Galita* island, the ancient *Calathe*, once a favourite resort of pirates, when they wished to careen their ships or lay in fresh water. It is easily recognised from its outline, the S.E. extremity is rugged and steep, and the sugar-loafed peak over it appears isolated when seen from the north or south; in a bay on its south side is temporary anchorage. Off the N.E. end are three islets—*Gallo*, the outermost and largest, is about a mile distant; *Polastro* is the centre and smallest; and *Gallina*, the inner, is half a mile from the island. At 1½ m. S.W. of the S.W. end of *Galita* are two other larger islets, *Galitona* and *Aguglia*. At a distance of 14 m. W. by S. of the north end of *Galitona* are the *Sorelle Rocks*. In 1847 H.M.S. *Avenger* was lost on one of them. The crew consisted of 270 persons, all of whom were lost, with the exception of a lieutenant and 4 men. A little farther on, about 3 m. from the shore, are two high rocks, the *Fratelli*, the *Neptuni aræ* of the Romans, one of them exactly resembling a high-backed chair; passing these the bold promontory of C. Blanc is passed, easily identified by the white colour

at its extreme point; then an indenture of the coast-line marks the site of

377½ m. Bizerta.

This place is so exceptionally interesting and so likely to play an important part in the naval history of the future, that the traveller to Tunis is strongly advised to land here and to proceed to his destination by railway (see p. 314).

The name Bizerta, called by the French *Bizerte*, is a corruption of the Arab one *Binzerte*, which is derived from the ancient one *Hippo Zarytus*, or *Diarrhytus*, so named to distinguish it from its neighbour *Hippo Regius*, the modern Bône.

It was an ancient Tyrian colony, and was fortified and provided with a new harbour by Agathocles, in the 4th century B.C. It was subsequently raised to the rank of a Roman Colony, as is testified by an inscription built into the wall of Borj Sidi Bou-Hadid, containing the ancient name of the place,—COL. IVLIAE. HIP. DIARR.

El-Bekri mentions that this place was conquered in A.H. 41 (A.D. 661-2) by Moaouia ibn el Hodaj. Abd el Melek ibn Merouan, who accompanied him in this expedition, having been separated from the main body of the army, obtained shelter in the house of a native woman. When he became Khalifa, he wrote to his lieutenant in Ifrikia to take care of this woman and all her family—an order which was of course carried out.

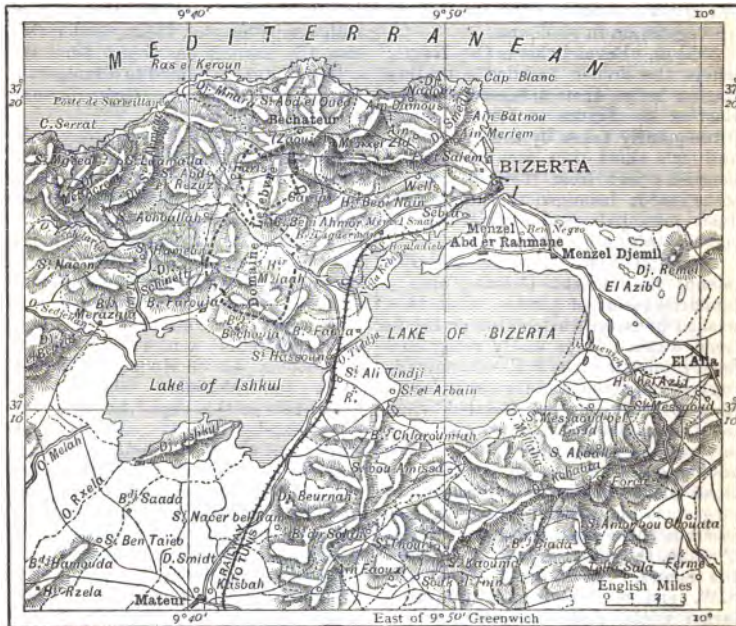
Marmol says that although the city contained only 4000 inhabitants they frequently revolted against the kings of Tunis and the lords of Constantine, which was often the cause of their ruin. When Kheir-ed-din took possession of Tunis, they were the first to recognise him, and when he was expelled they killed the governor whom Mulai Hassan had sent with a garrison, and received a Turkish garrison into their fort. Mulai Hassan attacked the place by land, while Andrea Doria co-operated with him by sea, and so the place was taken by assault—"et le Roy chastia rigoureusement les habitans qui s'estoient

revoltez trois fois et qui n'avoient jamais gardé la foy ni par amour ni par crainte."

Under the Tunisian Government it sunk into a very dilapidated condition; nevertheless, when the writer first visited it in 1876 there was a population of about 5000 souls, containing 200 Europeans.

The situation of the old town is very picturesque, being built on each

side of a canal, connecting the lake with the sea, and on an island joined to the mainland on either side by a bridge. The small harbour was silted up with sand, and could only be used by vessels of the smallest size. It still remains an interesting historical monument, surrounded by walls, the entrance to the canal being protected by what in former times would have been considered formidable defences.



Walker & Howell sc.

To the W. was an isolated fort called Borj Sidi Salem, built on a rocky promontory jutting out into the sea.

The important feature of Bizerta is its lake, called *Tinja* by the Arabs, formerly *Sisara lacus*, the finest harbour and the most important strategical position in the Mediterranean. A glance at the map of the Mediterranean will show what a commanding position it occupies, projecting like a sentinel in the narrowest part of that sea,

on the great commercial highway between Gibraltar and the Suez Canal; immediately S. of Sardinia, with its fortress of Maddalena, 240 miles N.W. of Malta, 420 from Toulon, 443 S. of Spezzia, 300 from Naples, 714 from Gibraltar, and 1168 from the Suez Canal.

The length of the lake from E. to W. is about 13 kil., and its width 9, with a depth of from 5 to 7 fathoms, forming a perfectly landlocked har-

bour containing 50 square miles of anchorage for the largest vessels afloat. The western bank is rather low and is covered to the water's edge with olive trees. The opposite shore slopes gradually up to a height of 200 feet in some places. It is well wooded and park-like in appearance. It would form a splendid suburb for a great city. The view from it, both of the salt and fresh water lakes, bounded in the distance by the remarkable mountain of *Djebel Ishkul*, suggests to the mind the Lake of Lucerne and the Bernese

Oberland on a small scale, or the Bocche de Cattaro seen from the heights of Montenegro.

The possession of this lake was probably one of the chief reasons which induced the French to occupy Tunis; at all events, they have not been slow to turn it to the best advantage. The concession for the construction of a new harbour and canal was given by the Beylical Government on the 11th May 1890, and early in 1895 they were formally opened.

An outer harbour has been made



by two convergent breakwaters 1000 mètres in length, enclosing a triangular space with an area of 90 hectares (220 acres). This is connected with the lake by a canal 100 mètres wide and 8 mètres deep, embanked with masonry, and provided with quays alongside of which vessels can lie for discharging and taking in cargo. Beyond this the canal widens out and forms the commercial harbour in which almost any number of ships can anchor. Merchant vessels are not permitted to enter the lake, which will not be open to navigation.

There can be little doubt, however, that within a short time it will be ready to receive a French squadron, and that all the various establishments will be constructed necessary for a naval port, while the heights around the town will be so fortified as to make the place impregnable.

In addition to numerous roads in the vicinity, a railway has been constructed connecting Bizerta with Tunis, and with the general system of Algeria at Djedeida.

The lake teems with excellent fish, which produce a large revenue to the

ancient Carthage. The fortress which defends it has been frequently besieged, the most celebrated occasion being that by Charles V. (see p. 37).

The town is extending in the direction of Carthage, the new quarter being much in favour with the Tunisians in summer, on account of sea-bathing. There is, however, very little trade carried on.

Before the opening of the canal, the ordinary means of reaching Tunis was by the Italian railway. In summer eight trains run daily each way, four direct, and four call at the Marsa Station; in winter the trains are reduced to five, of which two only call at the Marsa. The distance is 17 kil.

This railway was originally constructed by an English company, and when it was determined to wind this up, a great struggle took place between the French Bône-Guelma and the Italian Rubattino Companies for its possession. Both parties agreed that the railway, with its plant, should be put up to auction in the Vice-Chancellor's chambers in London. It was adjudged to the Rubattino Company for the sum of £165,000.

Now the importance of the Goletta has greatly diminished. A canal has been cut through the lake, placing the city in direct communication with the Gulf of Tunis. The undertaking was begun by the *Société des Batignoles* in 1885, and it was formally opened to navigation on the 28th May 1893.

The portion of the canal before entering the lake is 1750 mètres in length by 100 m. in breadth, and is dredged to a depth of $6\frac{1}{2}$ m. from the lowest low-water mark. Within the lake the canal is 8900 m. in length, 30 m. in breadth, and $6\frac{1}{2}$ m. in depth. A space of 500 m. long in the centre of the lake is widened out to 45 m.

A basin has been made at the Tunis end 400 m. by 300 m. and $6\frac{1}{2}$ m. deep. The basin at the Goletta end is 350 m. by 165 m., and communicates with the basin of the old canal.

The lake itself, called by the Arabs *El-Bahira*, the little sea, is about 18 kil. in circumference, but nowhere, save in the canal, more than from 1 to 2

mètres deep. In the centre is an island named *Chékeli* containing the ruins of a mediæval fort. The other lake to the S.W. of Tunis is the Sebkhâ-es-Sedjoui.

ROUTE 2.

Algiers to Tipasa and Cherchel.

This is probably the most interesting excursion that can be made in the Department of Algiers. Hitherto it has not been a very favourite one, owing partly to the difficulty of communication, and partly to the wretched hotel accommodation at Tipasa. Both these objections have now been overcome, the former by the new steam tramway between El-Affroun and Marengo, and the latter by the erection of a new and comfortable hotel by M. Trémaux, well known for the extent of his explorations amongst the ruins of ancient Tipasa, which are on his land, and for the care which he has bestowed on their preservation.

There are two routes by which Tipasa and Cherchel can be reached: one by a diligence which starts every night from Algiers by the coast road, and passes through Castiglione and Tipasa, reaching Cherchel early next morning; this we cannot recommend.

By the other the traveller proceeds by the ordinary P.L.M. train, preferably by that which starts at 6.40 A.M. It reaches El-Affroun at 9.6 A.M. There he meets the steam tramway for Marengo, and reaches that place at 10.29. He will have time to breakfast at the Hôtel de Marengo (Madame Boudet), and he will be able to procure a carriage (10 f.), which will take him to Tipasa in an hour. The distance is 10 kilomètres.

There is a public conveyance, but it is very bad; there is also a diligence for Cherchel three times a day.

To commence with Tipasa:—

The tramway from El-Affroun is one of a series in course of construc-

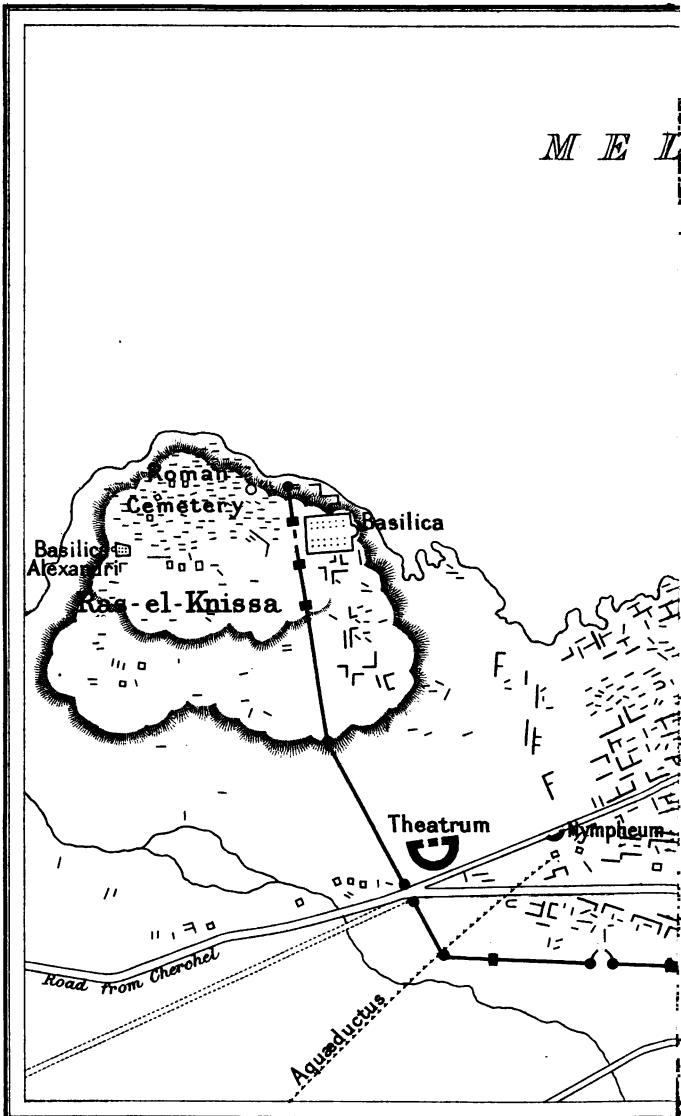
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tion by the *Compagnie des Tramways Départementaux*. The other lines are from Algiers to Koléa, from Algiers to the Maison Carrée and Rovigo, and from Dellys to Boghni. It passes the villages of *Ameur el-Ain* and *Bou-Rkika* through a richly cultivated country; there is a fine view of the *Tombeau de la Chrétienne* all the time. At 20 kil. from El-Affroun is *Marengo* (pop. 2049), in the centre of a very fertile district, with vineyards extending over an area of many hundred acres. It is well supplied with water, brought by a canal from the barrage of the *Oued Meurad*.

The road to Tipasa leaves the village by the western avenue, and passing the tortuous bed of the *Oued Meurad* enters the so-called forest of Sidi-Sliman. To this succeeds a very picturesque country, watered by several streams, which, uniting, form the *Oued Nador*.

Tipasa is but a small village (pop. of Commune, 1160), created in 1859. It is beautifully situated on rising ground close to the sea, with a splendid stretch of sandy beach to the west. It is much frequented by sea-bathers in summer, and is at all times a pleasant place of sojourn for a few days. It has a small harbour in which coasting steamers or yachts can lie in safety during ordinary weather.

The great interest of Tipasa, however, lies in its past history and its extensive Roman remains. Excepting on the site of the present village, the outlines of the ancient city are still clearly distinguishable. The sea, which is constantly advancing, has thrown down part of the rocks on which it stood, and like too many other places in Algeria, it has served as a quarry for modern buildings both in Turkish and French times.

The plan, which is borrowed from Monsieur Gsell,¹ shows, better than

any description, the position and extent of the ruins.

Not very much is known of the history of Tipasa. The name is Phœnician, and it occurs in two other places in North Africa. The Arabs corrupted it appropriately enough into *Tifased*, the ruined. A Punic establishment or factory certainly existed here, and when the power of the Carthaginians disappeared from the coast it fell under the dominion of the native Kings of Mauretania. A few years after A.D. 40 the Emperor Claudius made it a Latin colony, and shortly after it became a city, with full municipal government. The time of the later Antonines was for it, like most places in Africa, the period of its greatest prosperity, when it probably had a population of about 20,000 inhabitants.

The country round was richly cultivated, and remains of Roman villas and farms are found in many directions.

It was probably a commercial centre, owing its existence to the small port to the east of the city, and the outlet for the produce of the western part of the *Metidja*. It was situated on the great coast highway between Icosium and Cæsarea, and roads led from it to various places in the interior. It contained a Jewish colony, attracted no doubt by the trade of the place, and the *Passion of St. Salsa* mentions the existence of a synagogue there.

Although prosperous, Tipasa had none of the splendour of its neighbour Cæsarea and other great cities of Mauretania and Numidia; its public buildings, though numerous, were not in any way remarkable. The sculptured sarcophagi which have been found here were probably made at Cæsarea, and the only literature which has come down to us from it consists in some barbarous Latin

1. Tipasa, *Mélanges d'Archéologie et d'Histoire de l'École Française de Rome*, XIV^e Année, Fas. iii.-iv., Oct. 1894, pp. 275-450.

2. *Recherches Archéologiques en Algérie*, Paris, 1893, 8vo, p. 434, with numerous plans and illustrations by M. Pierre Gavaud, who also has been an indefatigable explorer of Tipasa.

1 M. Gsell, the learned professor of archaeology at the *École des Lettres*, has made a very complete study of Tipasa, and it is from his writings that this description is chiefly taken. His principal articles on the subject are as follows:—

verses preserved in the mosaics and the passions of two martyrs, St. Salsa and St. Fabius of Cartenna (Ténès), the MSS. of which exist in the *Bibliothèque Nationale* of Paris, and have lately been published by the Bollandist fathers.¹

Christianity was introduced at a very early period. The epitaph of Rasinia Secunda, which was found here, but which has since disappeared, bears the date A.D. 238. The Abbé Duchesne believes this to be the earliest dated Christian inscription which has been discovered in North Africa, and there is every reason to believe that a bishop existed here in the 3rd century.

A hundred years later paganism was deprived of official support, but the mass of the people still continued to adore the local deity, a bronze serpent with a golden head and eyes of precious stones, a relic probably of the Punic worship of Eshmoun.

About A.D. 371 King Firmus, at the head of an army composed of natives anxious to free themselves from Roman domination, bandits of all kinds, and Donatists animated by violent religious hatred, invaded this part of Mauretania, sacked its cities, especially Icosium and Cæsarea, but failed to reduce Tipasa. This forms a dramatic incident in the *Passion of St. Salsa*, as will hereafter appear. Soon after, Theodosius, sent by Valentinian against Firmus, reached Tipasa, and it was probably about this time that important edifices were constructed and existing ones embellished.

In A.D. 484 the Vandal king Huneric imposed upon the Catholic inhabitants of this city an Arian bishop, in order to compel them to embrace that heresy; a great number of the inhabitants fled to Spain, and some of the remainder, who refused to apostatise, had their right hands cut off, and their tongues torn out, in spite of which they are said to have

regained the use of speech. This miracle has been repeated by numerous writers, but Victor Vitensis is the only one who has connected it with Tipasa. After the persecution of Huneric, Tipasa appears no more in history.

The ancient city was built on three low hills; that on the east and that on the west were partly enclosed within the ramparts, which extended from the cliffs above the sea and ran in a curved line to the south of the present village. The central and largest hill was entirely within the *enceinte*, and formed a projecting headland, where is now the light-house. This is the *collis templensis*, where the brazen serpent was adored. A great part of the city also was here, including a Jewish synagogue and a basilica in honour of St. Salsa. No trace of these buildings now remains.

Basilica of Saint Salsa. On the summit of the eastern hill, *Koudiat Zarour*, and about 300 mètres beyond the ramparts, may be seen the remains of a large church, the most interesting monument in the place, the basilica in which was interred St. Salsa, whom the writer of the *Passion* calls *gloriosissima feminarum Tipasitanæ*.² Her parents were pagans, but Salsa had been baptized, and though only fourteen years of age, she was animated with the most enthusiastic faith. One day her parents took her, in spite of her reluctance, to a feast in honour of the brazen serpent. She protested fearlessly against the sacrifices and impure rejoicings which took place, and when the spectators had finished their rites and were sunk in a drunken sleep, she took the head of the serpent and cast it into the sea. She returned with the intention of throwing the body in also, but it made so much noise in falling that it awakened the sleeping populace, who rushed upon the girl, stoned her, pierced her with swords and arrows, and cast her body into the sea that it might be deprived

¹ The former, till then unpublished, is contained in the *Catalogus Codicum Hagiographicorum Latinorum*, Bruxelles, 1886, tom. i. pp. 4-352.

² It is to the Abbé Duchesne that the honour must be given of having been the first to attract notice to the historical interest of this monument, the only undoubted resting-place known of an African saint and martyr.

of burial rites. The waves, however, carried it into the harbour, close to the vessel of a certain Saturninus, who had just arrived from Gaul; a tempest suddenly arose, and Saturninus, then asleep, had a vision that if he did not give burial to a body in the sea near his vessel, he would certainly perish. At first he paid no attention to this warning, but the gale increased, and as all hope of safety appeared gone, he leapt into the water, and his hand was miraculously guided to the girdle of the saint. He took the body in his arms, rose to the surface, and immediately the storm was succeeded by a perfect calm.

Saturninus and his companions took the body ashore and buried it in a humble chapel, *breve admodum tabernaculum*, near the port and outside the ramparts. The *Passion* terminates with the following story. After having burnt the neighbouring cities, the Moorish king, Firmus, then in revolt against the Empire, appeared before Tipasa; he besieged it in vain for eight days; at last he entered the Chapel of St. Salsa and implored her favour and protection, but his prayers were unheard. The bread and the wine, which he placed on her altar, fell to the ground; the tapers which he lighted were extinguished; in a state of fury he struck the tomb with his lance, and left uttering blasphemies. That very day his army was routed and he himself died shortly afterwards, victim of his impiety. This must have happened towards the end of the 4th century.

The piety of the faithful converted the "humble chapel" into a basilica, which was enlarged at various periods; there is evidence of several reconstructions, the length especially has been more than doubled.

This has lately been excavated under the direction of M. Gsell. The original building was 15 mètres square, with an apse at the east end. It was constructed in the middle of a cemetery, the walls of the apse actually rest on two sarcophagi. The interior of the church itself and the whole of the ground round about it is full of stone

coffins, some of which are covered with mosaics.

The interior of the basilica is divided into a nave and two aisles by two series of pillars. In the centre of the original portion was a tomb, the inscription on which was:—*D(is) M(anibus) Fabiæ Sals(a)e matri sanct(issimæ) et rarissimæ et incomparabili quæ vivit ann(is) LXIII. M(ensibus) II. d(iebus) XXVII. h(oris) VIII. Ob merita eius f(iliis) et n(epotis) aeducatrici suæq(ue) constabilitos (=constabulitrici) rei fecer(unt).*

The deceased was probably a pagan, and it is certain that the monument was erected before placing the mosaic with which the nave was paved, and probably before the church was built.

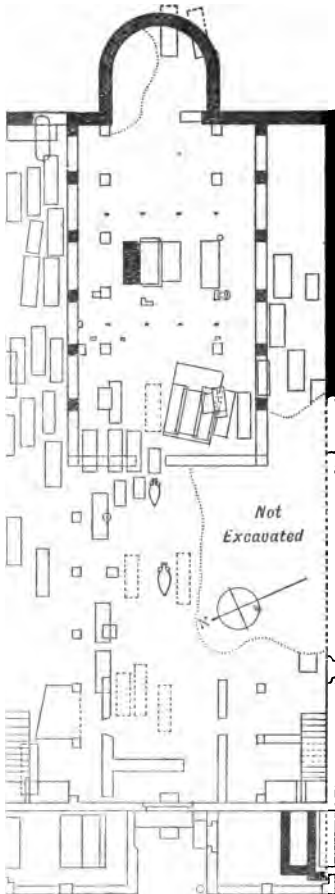
Fabia Salsa, a rich matron as the inscription indicates, was probably of the same family as the saint, and this may have been the family tomb. Between it and the apse is a mosaic, which, unless the Government, to whom this ruin belongs, intervenes, will soon be entirely destroyed. It contains an inscription in honour of the saint herself. The following is the text with the restitution proposed by M. Gsell and other distinguished scholars:—

Munera quæ cernis sancta altaria
fulgent,
[His opus l]aborque inest cura[que
Pot]enti,
Creditum [sibi qui gau]det perficere
munus.
M[artyr] hic est Salsa, dulcior nectare
semper,
Quæ meruit cælo semper habitare
beata,
Reciprocum saneto [gau]dens [mu]nus
impertire Potentio
[M]eritumq(ue) ejus c[a]jlorum regno
prof[bavit].

A great number of fragments of a marble sarcophagus were found here; it was probably pagan, but utilised for the remains of the saint, and raised conspicuously on a plinth. Round it was an iron railing, the holes to receive which are still visible.

A suggestion has been made that when the persecution of Huneric broke

t, and when the great mass of the population preferred rather to quit their native place than to be converted



Basilica of St. Salsa.

Shaded portions Original Structure
 Inshaded portions Subsequent additions
 ————— Stone Coffins

Arianism, they may have carried off relics of their saint with them, as the Christians of Hippone did those

of St. Augustine, and that when peace was restored to the Catholic Church under Hildebrand, the people returned with their beloved relics and restored and enlarged the former basilica, as a more worthy resting-place for them.

At a short distance S. of the basilica are the remains of another building, probably a dependency of it.

Ancient Harbour. Standing to the N. of this basilica a good view of the ancient harbour is obtained; two islets which gave a certain amount of shelter were joined together by a breakwater; others projected to the E. and W. in a southerly direction, leaving a waterway between them and the shore. Remains of masonry are still visible on one of the islets, and it is stated that traces of the breakwater were seen some years ago.

Ramparts. Although no part of the ramparts are in a state of even tolerable preservation, the whole circuit may easily be traced. They were about 1·60 mètres thick, and strengthened by round towers and quadrangular bastions. Access to the city was obtained by three gateways, one of them of peculiar construction. The opening was flanked by two large towers in the wall, and beyond were two smaller ones at a less distance apart, connected with the others by curtains of a curved shape. Some large fragments exist on the extreme W. of the line of works which shows the manner in which they were probably destroyed by the Vandals. The walls were cut away by pickaxes, on both sides, close to the foundations, and then tilted over. The parts thus cut into an angle are clearly seen uppermost, while the top of the walls rest on the ground.

There is not much more of interest in the eastern part of the town; it was probably the locality given up to commerce and shipping; there are traces of what might have been large granaries or storehouses.

The Baths were in the centre of the city; but they are so deeply buried in earth as to be hardly visible.

The Amphitheatre to the S.W. of

them can only be traced ; its major axis was about 95 metres in length.

The Collis Templensis is covered with the remains of construction, but nothing of importance can be identified.

Nymphæum. To the W. of the amphitheatre is an interesting monument which M. Trémaux has cleared out—a Nymphæum in the form of a hemicycle. A semicircular basin at the base received the water which came to it from the Oued Nador ; the marks of constant use are visible on its wall, as well as repairs executed, and provision for cleaning it out. Above was a colonnade with four columns of marble, having their bases and capitals of stone.

Theatre. Still farther to the S. W. are the ruins of a theatre in a very bad state of preservation. It was small and could hardly have contained more than 2000 spectators.

The Great Basilica. This is a very important edifice close to the end of the ramparts, on the western hill, to which it has given its Arabic name, *Ras el-Knissa*, Cape of the Church. It was evidently the principal church of the city, but it is now in a very bad condition, having served as a quarry for generations. It is still possible to make out the plan. It appears to have been, after that of Damous el-Karita at Carthage and that of Tebessa, the largest church in North Africa. It is turned in the orthodox manner, with the apse to the E. and the door to the W. It was divided into seven naves, separated by pillars surmounted by archivolts. The central one was the largest and was entirely paved with mosaics, showing an infinite variety of designs. At a period subsequent to the original construction, this nave had been divided into three by two rows of columns, perhaps to support the roof ; this is shown by their being simply built on the mosaic floor without any foundation or any break in the continuity of the pattern. Only three entire capitals have been found—two were Corinthian and one was Ionic. Eight uninjured bases still exist. A great part of the apse has fallen into the sea.

To the N. of the basilica were a number of dependencies, part of which have also fallen into the sea ; one was a small chapel, another a baptistery with a central font for immersion ; adjoining it was a hall paved with mosaics, only fragments of which remain, showing figures of birds. Monsieur Gavault found here the following inscription :—

*Si quis ut vivat querit addiscere semper
Hic lavetur aqua et videat caelest[ia
dona.]*

Beyond the rampart here is another great cemetery, full of stone coffins, some of them double. Here also is

The Basilica of Bishop Alexander ; it was somewhat irregular in form, divided into a nave and three aisles by two rows of pillars. The first was entirely covered with mosaics. To the E. is a sort of *estrade*, composed of nine stone coffins, which were formerly covered with mosaics ; the inscription on the floor in front of them gives some idea of their nature ; it is in verse, and proves that the people buried there were held in veneration, *justi priores*, perhaps predecessors of Bishop Alexander in the see of Tipasa, in whose honour he had constructed this church.

His own inscription also is in the nave ; it contains nine lines detailing all his good qualities, as follows :—

*Alexander episcopus, legibus ipsis et
altaribus natus,
Etatibus honoribusque in ecclesia
catholica functus,
Castitatis custos, karitati pacique
dicatus,
Cuius doctrina floret innumera plebs
Tipasensis,
Pauperum amator, elemosinae deditus
omnis,
Cui numquam defuere unde opus caeleste fecisset,
Huius anima refrigerat, corpus in pace
quiescit
Resurrectionem expectans futuram de
mortuis primam
Consors ut fiat sanctis in possessione
regni caelestis.*

At the W. end of the church is an apse with several tombs. The mosaic in front of it contains seven rows of fishes and crustaceans. The whole building is full of stone coffins covered with mosaics. Its date is probably about the end of the 4th century.

There are many tombs all around the building, some excavated in the rock, and even mausolea. One of the latter is very remarkable; it is just outside the northern point of the ramparts, opposite the great basilica. It is a circular building with half engaged marble columns on the exterior wall. The interior diameter is 18 mètres, with 14 arcossolia round the circumference for the reception of stone coffins, two in each; the sarcophagus in the niche opposite the door was probably that of the founder; it was of marble, richly sculptured, now broken into minute fragments. A number of stone coffins were placed in the central portion, probably at a later period. It is doubtful whether this large mausoleum could ever have been covered in.

Monsieur Trémaux has collected in his garden, close to the Hôtel du Rivage, all the interesting objects which he has found in the course of his researches, amongst them are two beautiful marble sarcophagi, nearly perfect, of early Christian times, and an immense amphora, 5 mètres in circumference.

[An excursion may be made on horseback to the marble quarries of Chenoua; they are not worked at present; specimens may be seen in the National Gallery at London.]

To visit Cherchel the traveller may either go direct by the night diligence from Tipasa, or what is preferable, he can return to Marengo and either proceed by the diligence which runs three times a day, or hire a carriage.

The kilomètric distances are now marked from 1 upwards, commencing at *Bourkika*, the junction of the *Miliana* road.

18 kil. *Zurich* (pop. 632). A small village situated on the banks of

the *Oued el-Hachem*. It was founded, in 1848, on the ruins of a Roman villa. An Arab market is held here every Thursday. This village made a very gallant defence during the insurrection of 1871. A party of 30 militia and 40 military prisoners, nearly all of whom were prostrate from fever, strengthened a private house by a hastily constructed stockade, and successfully held it during many days against a strong force of the Beni-Manasser.

22 kil. On the left of the road is passed part of the aqueduct which led the waters of the *Oued el-Hachem* and the copious springs of *Djebel Chennoua* into *Cæsarea*. It consisted of two converging branches following the contour of the hills as open channels, or traversing projecting spurs by means of galleries. In only two places was it necessary to carry the water over valleys by means of arches. The first was at this spot, the second a few kilomètres farther on, at the junction of the two branches where the united waters were carried over the *Oued Bellah* on a single series of arches, of which five remain.

At the former place the water was carried over a deep and narrow valley on a triple series of arches, most of which are still entire, with the exception of a gap in the centre. The lower and middle series consisted each of 7 arches, of which 5 are complete; the upper one had 16, of which 13 remain. The masonry is only of cut stone as far as the spring of the middle arches; the upper part is of rubble. All the superstructure above the bottom of the specus has disappeared, but at the south end there still remains a circular basin, intended to break the fall of the water and receive any stones or sand that might be washed down from the hills, leaving only the clear water to flow into the duct beyond.

32 kil. **Cherchel**. Pop. 5313.

Cherchel was originally the *Jol* of the Carthaginians, and was made the capital of *Mauretania* by Juba II., under the name of *Cæsarea*. After various vicissitudes it was destroyed

by the Vandals, but regained somewhat of its splendour under the Byzantines. Ibn Khaldoun informs us that it fell into the hands of the Merinides in 1300. The Moors from Andalusia found shelter here at the end of the 15th century; Kheir-eddin took it in 1520, and in the following year Doria burnt part of the Algerian fleet here, but on attempting to effect a landing he was repulsed and obliged to retreat. When it was visited by Shaw in 1730 it was in great reputation for making steel, earthen vessels, and such iron tools as were required in the neighbourhood; its ruins were still very magnificent, but it was entirely destroyed by an earthquake in 1738. In those days there was a tradition that the more ancient city also had been destroyed by an earthquake, and that the port, formerly large and commodious, was reduced to its present dimensions by the arsenal and other adjacent buildings having been thrown into it by the shock. It is pleasantly situated in a very picturesque plateau west of the Oued Bellah, and between the mountains of the Beni-Manasser and the sea. Ruins of former magnificence exist in every direction, and wherever excavations are made, columns and fragments of architectural details are found in abundance; unfortunately little or no regard has been paid to the preservation of the numerous remains which existed even as late as the French conquest. Most of the portable objects of interest have been removed to museums elsewhere, and nearly all the monuments have been destroyed for the sake of their stones. There was a **Theatre** below the barracks, facing the sea, the cut stone of which was taken to construct the barracks, leaving a mere hole which served as a quarry. The site of the spectators' seats is still traceable. Also a **Hippodrome** behind the barracks, the site of which is still distinctly seen. It was about 400 mètres in length. A part of the retaining wall of the Spina, which was in the centre, and round which the horses raced, is still visible, but most of the

[Algeria]

stones were removed to build the church. The hippodrome had a portico supported by columns of granite and marble, to which access was obtained by a magnificent flight of steps. The remains of this portico were destroyed by Cardinal Lavigerie, who thought that he might find there the tomb of St. Marcianus. Here it is said that St. Arcadius suffered martyrdom by being cut in pieces. Splendid baths existed both in the vicinity of the amphitheatre, where is now the *Champs de Mars*, and on the opposite side of the town overlooking the port. Even as late as the author's first visit to Cherchel, a curious old fort existed on the public place, built, as an inscription in the museum testifies, by the Caïd Mahmoud bin Fares Ez-zaki, under the government and by order of *The Emir who executes the orders of God, who fights in the ways of God, Arouj, the son of Yakoub, in the year of the Hejira 924*. This was built of older Roman materials found on the spot by the celebrated corsair Baba Arouj, surnamed by Europeans Barbarossa.

Numerous columns of black diorite, and the breccia of Djebel Chennoua, lie scattered about the place, as well as magnificent fragments of what must once have been a white marble temple of singular beauty. In the museum a great variety of fragments are collected, many of which probably belonged to the same building, together with broken statues, tumulary, and other inscriptions, capitals, and bases of columns, amphoræ, etc.; and in one corner, amongst a heap of rubbish, are some precious specimens illustrating curious facts connected with the state of the industrial arts during the time of the Romans. For instance, a small section of a leaden pipe shows us that such implements were then made by rolling up a sheet of the metal, folding over the edges, and running molten lead along the joint. An ingot of the same metal exists, as perfect as when it left the foundry, with the maker's name in *basso relievo*. Candelabra in bronze decorated with female heads finely

worked. There is a boat's anchor much corroded, but still perfect in shape, a sun-dial of curious design, and, most interesting of all, the lower half of a seated Egyptian divinity, in black basalt, with a hieroglyphic inscription. This was found in the bed of the harbour, and may have been sent as a present to the fair Cleopatra Selene from her native land. Monsieur Waille, however, thinks that the Egyptians occupied for a short time this corner of the coast about 1500 years B.C. It was customary with them to erect a temple where they did form a settlement, and to place in it a statue of the reigning prince. This one bears the cartouch of King Totmes III. When they were expelled, the statue may have been thrown down and broken.

One of the most interesting buildings in the town is the military hospital, once a Mohammedan mosque, supported on 89 columns of diorite, surmounted by capitals brought from other buildings, without regard to size or style. The bases are embedded in the ground, it having been found necessary to raise the floor in order to protect the building from damp. The mosque, which was of immense size, has been divided by partition walls to make four separate wards. It was called the Mosque of the Hundred Columns.

In the *Place* a monumental fountain was built in 1894 with materials from the museum. Two antique vases, supported by capitals of columns, the base decorated with four colossal heads of marble, representing Neptune and Nereides; an octagonal border made of fragments of cornice; on the steps, bases of columns, quadrangular pillars, etc.

From an antiquarian point of view, there is no place in the province of Algiers so interesting as Cherchel and its neighbourhood; and however reckless has been the destruction of the precious architectural treasures which it contained, abundance still remains to testify to the splendour of the capital of Mauretania Cæsariensis.¹

¹ Monsieur Waille, professor at the *École des Lettres*, has devoted himself to the study of

The ancient cisterns, capable of containing two million litres of water, support part of the barracks, and have been thoroughly repaired. They now supply Cherchel, as they did the ancient city.

Marshal Clauzel nominated Haj-Omar as Bey of Cherchel in the year 1835; but he was unable to maintain his position, and the town was taken by Berkani, a khalifa of Abd el-Kader.

In consequence of an act of piracy, Cherchel was seized by Marshal Valée, in March 1840; and in August of the same year the neighbouring chiefs submitted to the French rule.

During the revolt of 1871 Cherchel was blockaded on the landward side for about a month. A party of the insurgents carried massacre and devastation throughout its environs, the aqueduct was cut off, and the inhabitants had no water, save what was contained in the ancient reservoirs.

[If the traveller has a carriage he may proceed from Cherchel to the *Tombeau de la Chrétienne*, and reach the railway station of El-Affroun in time for the evening train to Algiers (see Rte. 3). Carriage from Cherchel to El-Affroun 18 f.]

[Excursion from Cherchel to Ténès on horseback.

7 kil. *Novi*, a small agricultural village.

15 kil. *Fontaine-du-Genie*, another small village.

17 kil. *Oued Messelmoun*, where is an iron mine worked for some years by an English company, but now abandoned.

All along the course of the road are ruins of Roman hamlets and farms; one of these is on the left bank of the *Oued Sebti*, about 800 yards from the sea; another is 4 kil. farther to the W., but the most important is on the plateau of Sidi Brahim, situated between two little bays, that to the W. especially being well sheltered from the wind. There are the remains of a fortified position, of an irregular

Cherchel; his researches and writings have thrown much light on this ancient city.

polygonal form, the walls following the configuration of the promontory. This contains large cisterns, and a postern with staircase descending to the sea. Behind it are the remains of the town, and traces of an aqueduct.

30 kil. *Gouraya*, a village in the neighbourhood of which are important iron mines. Up to this point the road is good and fit for carriages; beyond, it is only practicable on horseback.

45 kil. *Oued Damous*, the most considerable stream in this part of the country, flowing through a rich and fertile district, but inhabited only by Arabs and Kabyles. There are numerous Roman ruins scattered about, and there is reason to suppose that the *Cartili* of the itinerary of Antonine was at the mouth of this river.

After passing the Oued Damous, the aspect of the country changes, the mountains become higher and more abrupt, cultivated land ceases, and there appears no possibility of tracing a road to Ténès.]

ROUTE 3.

Algiers to Koléa and the Tombeau de la Chrétienne.

This journey may be made by diligence twice a day to Koléa, and a carriage hired to the Tombeau, or by a private carriage from Algiers. But if the traveller does not care to visit Koléa, by far the best plan is to proceed to Marengo (Rte. 2), and thence by carriage to the Tombeau and back (10 f.), or to the Tombeau and on to El-Affroun (20 f.)¹

Algiers to Staouéli (see p. 109).

About 2 kil. beyond Staouéli, the road branches off to Sidi-Feruch; and, passing over the beds of several mountain torrents, arrives, 3 kil. farther, at

26 kil. *Zeralda*, a village about 2½ m. distant from the sea.

4 kil. beyond Zeralda, the river

¹ A steam tramway is in course of construction (1896) from Algiers to Koléa.

Mazafran (lit. saffron-coloured water) is crossed by an iron lattice bridge, 73 mètres long.

[From this a road branches off to Tipasa, passing the village of *Castiglione*, formerly called *Bou-Ismaïl*, a favourite bathing-place for the inhabitants of Blidah and the plain; it traverses *Saidia*, a beautiful property belonging to the Rev. Edwyn Arkwright.]

From this point the road ascends through country for the most part uncultivated, and covered with brambles, to the village of

33 kil. *Daouda* (pop. 308), situated at an elevation of 300 feet above the sea; founded in 1843, and now flourishing and prosperous. The country adjoining is fertile and well watered, and the village is one of the prettiest of the Sahel. 5 kil. farther is

39 kil. **Koléa**. Pop. 4887.

Koléa enjoys a certain amount of renown, from the fact of the celebrated Marabout Sidi Ali Embarek having lived and performed many miracles in this place. He was originally the servant of a landowner named Bou-Ismaïl. It is said that he used always to sleep instead of doing his work, notwithstanding which his oxen would continue to plough the same as if he were driving them. This extraordinary circumstance was reported to Bou-Ismaïl, who one day hid himself near by, to ascertain the truth of the report, and saw Ali ben Embarek asleep as usual, whilst the oxen were at work. Bou-Ismaïl, astonished at the sight, fell upon his knees before Embarek, and ever afterwards treated him with the most profound respect, and on dying (A.D. 1630) bequeathed to him all his wealth. Ali ben Embarek was buried between a cypress and a palm tree; and in the earthquake of 1825, when the whole town was nearly destroyed, it is said that his koubba was the only building left uninjured.

In 1832 General Brossard was despatched to seize the Agha Sidi Mohammed ben Embarek, on the charge

of having been implicated in the insurrection; but not being able to find him, took prisoners two Marabouts of the same family, and fined the inhabitants 100,000 f., of which sum, however, they were only able to pay 10,000 f. Koléa was blockaded by Marshal Valée in March 1838; and it was finally occupied by the French in 1839. An ineffectual attempt was made to take possession of it by the Bey of Milianah in 1841.

Koléa is placed on a plateau at a height of 450 feet above the sea, and commands a fine view of the Metidja Plain, and of the range of the Atlas.

The town has been entirely rebuilt since its destruction by the earthquake in 1825; and like most other French towns in Algeria, consists of a few straight regular streets with tiled houses, and courtyards planted with fruit trees.

One of the most striking objects in Koléa is the garden which has been made in the small ravine separating the civil town from the military quarter. It is entirely the work of the French soldiers, and is kept with great care.

The principal *mosque*, now used as the military hospital, is a tasteful building, composed of five arched naves, supported by stone columns. There is a *minaret* attached, which has a striking appearance from the town. The *koubba* of Sidi-Embarek is a few paces from the mosque.

The camp, which is situated on a small hill to the S.W. of the town, is of considerable size, the barracks being able to accommodate 1200 soldiers; in addition to which there are commodious storehouses, and other buildings.

The *Market* is held daily in the Rue Es-Souk. The Arab market is held at the same place every Friday.

The principal object of interest, however, in the neighbourhood of Koléa is the great sepulchre of the Mauretanian kings, variously styled *Tombeau de la Chrétienne*, *Tombeau de la Reine*, or in Arabic *Kubr-er-Roumia*, tomb of the Christian woman.

It is one of three somewhat similar

edifices, one of which is found in each province of Algeria, the other two being the Medrassen, or Tomb of the Numidian kings in Constantine, and El-Djeddar in Oran.

This, however, is the only one mentioned by any ancient author. Pomponius Mela, in his work, *De Situ Orbis*, written about the middle of the first century, after the death of Juba II., but before the murder of his son Ptolemy, mentions both *Cæsarea* (*Cherchel*) and *Icoosium* (*Algiers*); and states that beyond the former is the *monumentum commune regie gentis*. This at once decides the nature of the building, which, though intended to be seen far and near, is yet entirely concealed from view at Cherchel by the mountain of Chennoua, the presumption being that the king would not care to have constantly within sight of his royal residence the tomb which he had caused to be constructed for himself. The resemblance to the Medrassen, or Tomb of the Numidian kings, from whom Juba was descended, is another presumption that it was erected by him in imitation of his ancestral mausoleum.

Juba II. married Cleopatra Selene, daughter of the celebrated Egyptian queen by Marc Antony, who had been carried captive to Rome after the battle of Actium and brought up by Octavia, sister of Augustus; there is every probability that this monument served only as his tomb and that of his wife, who died before him. It is hardly likely that the remains of his son Ptolemy, the last of his race, could have been transferred from Rome to Africa. His only other child was a daughter Drusilla, wife of Felix, Governor of Judea, who said to Paul, "Go thy way for this time, when I have a convenient season I will call for thee."

The tomb must have been violated at a very early period in search of hidden treasure. A careful examination of the accumulated earth and dust within revealed traces of successive races who had visited the place, some of whom had even made it a place of residence, but none whatever of the

bodies for whose reception it had been erected.

It is called by the Arabs *Kubr-er-Roumia*, Tomb of the Roman, or rather Christian woman, the word *Roumi* (fem. *Roumia*) being used commonly by Arabs all over the East to designate strangers of Christian origin. Various explanations are given of this name. Marmol mentions a tradition, that under it were interred the mortal remains of the beautiful daughter of Count Julian, over the story of whose misfortunes the muse of Southey has shed so strong an interest.

Shaw states that amongst the Turks it was known by the name *Maltapasy*, or Treasure of the Sugar Loaf; and the belief that it covered some great accumulation of riches has exposed it to attacks by which it has been much ruined, and before which a less solid structure would have altogether disappeared. Marmol adds:—

“In the year 1555 Solharraes (Salah Rais) attempted to pull it down, hoping to find some treasure in it; but when they lifted up the stones, there came a sort of black poisonous wasps from under them, which caused immediate death wherever they stinged, and upon that Barbarossa dropped his design.”

The Tombeau de la Chrétienne is built on a hill forming part of the Sahel range, 756 feet above the level of the sea, covered with a brushwood of lentisk and tree heath, situated nearly midway between Tipasa and Koléa, and to the west of Algiers.

It is a circular building, originally about 131 ft. in height; the actual height at present is 100 ft. 8 in., of which the cylindrical portion is 36 ft. 6 in., and the pyramid 64 ft. 2 in. The base is 198 ft. in diameter, and forms an encircling podium, or zone, of a decorative character, presenting a vertical wall, ornamented with 60 engaged Ionic columns, 2 ft. 5 in. in diameter, surmounted by a frieze or cornice of simple form. The capitals of the columns have entirely disappeared, but an accurate design of them has been preserved amongst the drawings of Bruce.

The colonnade has at the cardinal points four false doors, the four panels of which, producing what may have been taken to represent a cross, probably contributed to fix the appellation of Christian to it.

Above the cornice rise a series of 33 steps, which gradually decrease in circular area, giving the building the appearance of a truncated cone.

The whole monument is placed on a low platform 63 m. 90 c. square, the sides of which are tangents to the circular base.

During the Emperor Napoleon's last visit to Africa he charged the well-known Algerian scholars, M. Berbrugger and M. MacCarthy, late directors of the library and museum, to explore this tomb, which had never been penetrated in modern times, notwithstanding the attempt of Salah Rais in 1555, and the efforts of Baba Mohammed in the end of the 18th century, to batter it down by means of artillery.

In May 1866 a hole was drilled by an Artesian sound, which gave indications of an interior cavity, and shortly afterwards an opening was made from the exterior to the interior passage. Entering by this, both the central chamber and the regular door were easily found.

Below the false door, to the E., is a smaller one, giving access to a vaulted chamber, to the right of which was the door of the principal gallery. Above this the figures of a lion and a lioness are rudely sculptured.

From this passage a large gallery, about 2 mètres in breadth, by 2 m. 42 c. in height, is entered by a flight of steps. Along it are niches in the wall, intended to hold lamps. Its total length is 149 mètres. This winds round in a spiral direction, gradually approaching the centre, where are two sepulchral vaulted chambers, one 4 m. 45 c. by 3 m. 45 c., and 3 m. 45 c. high, and the other 4 m. by 1 m. 50 c., and 2 m. 75 c. high, separated from each other by a short passage, and shut off from the winding passage by stone doors, consisting of a single slab capable of being moved up and

down by levers like a portcullis. The lining of the passage and chambers is of beautiful cut stone masonry.

A more convenient way of visiting the Tombeau from Algiers, if time be an object, is to telegraph or write beforehand to any of the hotels at Marengo to order a carriage to be in waiting at El-Affroun station on the arrival of the morning train from Algiers. The traveller will have ample time to drive to the Tombeau and back, so as to catch the evening train from Oran to Algiers. He ought to provide himself with provisions and a few candles. As the key of the Tombeau is kept at a farm on the opposite side, he may be compelled to enter the building by an opening in the side opposite the door, a proceeding which necessitates a slight scramble. From Koléa there is a service of omnibuses every day to Blidah.

ROUTE 4.

Algiers to Rovigo and the Baths of Hammam Melouan.

Omnibuses from Algiers to Rovigo every day. There is also an omnibus at the railway station of Gué de Constantine, in correspondence with the morning train from Algiers, and the evening one to it; but the most convenient way is to drive from Algiers straight to the baths, which can now be reached by carriage; formerly mules were required from Rovigo.

Leaving Algiers the road passes Mustapha Inférieur, the Ruisseau and Koubba, whence it descends gradually into the Metidja.

12·7 kil. *Gué de Constantine*, rly. stn.; service of omnibuses to Rovigo.

14 kil. Road crosses Harrach by an iron bridge.

23 kil. *Sidi-Moussa* (250 inhab.) An agricultural village on the *Oued Djemäa*, an affluent of the *Harrach*, at the junction of the roads to Bou-Farik, Rovigo, and Aumale, created in 1851.

24·5 kil. Road crosses Oued Djemäa by a wooden bridge.

Hitherto the road has been over a highly cultivated part of the Metidja. As it approaches Rovigo it passes amongst orangeries and orchards of fruit trees, for which this place is celebrated, owing to the abundant means of irrigation.

30 kil. *Rovigo* (pop. 1088). Named after the Duc de Rovigo, Governor-General of Algeria, founded 1849.

The village is situated at the foot of the first slopes of the Atlas, at the point where the Harrach enters into the plain.

The road winds along the valley of the Harrach, through most picturesque mountain scenery; the sides of the ravine are well wooded with pines, thuyas, olives, etc., and the bed of the river is filled with oleanders.

37 kil. **Hammam Melouan** (the coloured bath). A small and by no means a comfortable inn is situated within a stone's throw of the baths; as it contains only three bedrooms, each with one small bed, accommodation should be secured beforehand.

The baths are situated in an open part of the valley, containing about 10 acres of park-like land, with fine old olive and lentisk trees, well adapted for camping out; in the season, from the middle of May till the end of June, and again in October, there are frequently as many as 70 tents pitched here, many of which belong to Europeans and Jews. The guardian is authorised to receive 5 centimes for each bath, and as this fee brings him in 700 f. a year, it follows that not less than 14,000 are taken annually.

There are two principal springs, one of which flows through a rude bath in the ancient Arab Koubba of Si Suliman; the other is in a similar piscine in a wooden hut beyond the auberge; both are dirty and ill cared for, and being only about 7 feet by 4, they do not afford adequate accommodation for the large number of visitors who frequent them. Were the water properly economised, and all the sources collected and led into well-constructed bathing-places, 600 baths a day might be available.

The water has a temperature of

103° Fahr., and contains nearly as much saline matter as that of Nauheim. The latter has 31·4 grammes of saline matter in every kilogramme of water, of which 27·3 are common salt. The Hammam Melouan contains 29·1 and 26·3 respectively; while the water of the Mediterranean has 30·2 grammes of salt per kil.

The springs of Hammam Melouan contain, moreover, a small quantity of iron, the red deposit of which gives rise to the name.

These thermal waters are deservedly held in high repute both amongst natives and Europeans, on account of their healing qualities in all rheumatic and cutaneous affections.

A steam tramway will soon be completed to Rovigo; it runs at present (1895) as far as Maison Carrée.

ROUTE 5.

Algiers to Teniet-el-Ahd.

By taking the early train from Algiers to Affreville, the journey can be done in one day. A diligence starts every day from the latter place on the arrival of the train, leaving Teniet on its return the following day at 9.30 A.M. The journey occupies eight hours.

Time is usually allowed for breakfast at the buffet of Affreville, but there is not always time to dine there on returning.

Carriages for the journey may be obtained at Milianah. The road leaves Affreville by the suburb of Charleville, and then strikes across the plain of the *Chélif*. On reaching the S. side of the plain, it takes a side sweep to the E., following the windings of the *Oued Massin*. By this means the necessary elevation is attained without any sudden or steep ascent. It is well engineered throughout, and is in good condition.

After the first 20 kil. the scenery is pretty, and the hills agreeably wooded with tamarisk, broom, juniper, and lentisk. Presently, as the road as-

cends, oaks and pines are seen among the brushwood. Several small auberges are passed.

27 kil. *Caravanseraï of the Oued Massin* or *Anseur el-Louza*, built on open ground, surrounded by splendid woods of oak and pine. Here the diligence changes horses, and drivers stop to rest. Travellers sometimes pass the night here. Excellent shooting in the vicinity.

35 kil. *La Camp des Chênes*, a small inn picturesquely situated, with a grove of evergreen oaks in front of it. This is a convenient mid-day halt if the traveller has a private carriage. A good breakfast may be obtained. Through the valley on the right a glimpse is obtained of the *Djebel Esh-Sham*, near *Taza*. After this the road ascends through a narrow gorge, finely wooded with Aleppo pine, and passes over a *Col*, close to a remarkable hill of conical shape, called "the Sugar Loaf," crowned by a pile of limestone rocks.

47 kil. *Auberge de la Rampe*, a small, clean inn.

57 kil. **Teniet-el-Ahd.** Pop. 3709. 3807 feet above the sea.

Horses and mules for an excursion to the Cedar Forest may be procured at the hotel; the "Rond Point," to which, in order to save time, travellers should go first, may even be reached in a carriage, but the road is very rough and sometimes impracticable. They should take provisions with them, and start as early as possible. It takes two hours to ride to the Cedars, and as many back. It would probably require nearly an equal time to go on foot, as the horses must walk all the way.

The village of Teniet-el-Ahd, signifying *Pass of Sunday*, from the Arab market held there every Sunday, is situated in a small grassy plain, surrounded by high peaks, at 3810 feet above the sea level, and has quite an Alpine appearance. It commands the pass through a remarkable break in the Atlas, by which easy communication is obtained between the Tell to the N., the *Ouarsenis*, the Plateau of

Sersou, and the *Hauts Plateaux* to the S. It is a pleasant village, of one long street, shaded with plane trees, and commanded by a fort on an eminence to the W., containing the barracks, the residence of the administrator, etc. The old Bureau Arabe is in a small fortified enclosure on a hill farther W.

The Cedar forest is on the range which extends W. for 25 to 30 kil., and then, after rising into a bold conical peak, 5844 feet, turns suddenly to the S., and forms a succession of low hills. The forest begins at about 3 kil. from the village, but it is at least 13 to the *châlet*, called "Le Rond Point des Cèdres," 4977 feet, where there is a beautiful lawn bounded by a semicircle of trees. Near this are the largest cedars, here also is the house of the Garde Forestier, and a small *châlet*.

The *Cedrus Libani*, var. *Atlantica*, is usually found in about 36° of N. lat., at a height of 4000 to 7000 feet above the sea. The young trees have a pyramidal form, but when one rises above its neighbours, and a blast of wind, lightning, or an insect destroys its leading shoots, the branches extend laterally, and the tree assumes an umbrella-like aspect, forming a shade impervious to the least ray of sun.

The lower portions of the range are covered with evergreen oak; the upper portions, on the N. side, with cedars, which descend the S. flank for only a short distance, the increased temperature not suiting them. The largest of the existing trees, "La Sultane," is nearly 100 feet high, with a diameter of 9 feet; another, "Le Sultan," now fallen, was even larger. The wild flowers are very beautiful in spring, especially the *Tulipa fragrans* and the *Fritillaria oranensis*, which are not found in the lower region.

This forest, being easy of access, was treated in the most ruthless manner by the military in bygone days before the Forest Department was properly organised. Trees were cut down and allowed to perish on the spot. Dead wood and dry grass produced fires which threatened its very existence,

and the Arabs were in the habit of burning the old grass to produce fresh pasturage for their flocks. Now the utmost care is taken of the forest, and its regeneration is rapidly taking place. Young trees are everywhere springing up, and though wood of average dimensions is still scarce, that is a want which will disappear in time.

The forest has an area of 2325 acres, and it contains a number of trees that might fairly be used; but to regard it in the light of a mere source of revenue would be unworthy of the Government; the giants of the forest there are of incomparable beauty and incalculable artistic value, and the Government has resolved to exploit it only in the most legitimate manner, so as not to destroy its great beauty.

The road, as it winds round the spurs of the range, gives views, that change continually, of the mountains and the trees, which, to appreciate them properly, must be seen from above as well as from below. It is worth while to mount to the top of the ridge (5643 feet) above "La Sultane," a steep climb of about 30 min. On reaching the crest, which is singularly sharp and well defined, a bare spur of limestone is seen, projecting S., from which a view of singular beauty is obtained. In front is the grand mass of the Ouaransenis, "L'Œil du Monde," with its triple peaks, unobstructed by any object to diminish its height or its grandeur. In the foreground is the Plateau of Sersou, an upland region, richly cultivated, and well wooded, gradually sinking towards the E. into the barren plain of the *Hauts Plateaux*, bounded in the far S.E. horizon by the mountain called *Sebâa Rous* or Seven Heads, which forms so conspicuous an object in the view from Boghar. To the N. are the various spurs descending to the valley of the Chélif, the mountains that bound the right bank of that river, Milianah and Djebel Zakkar, and even Bou-Zarea above Algiers. Almost as fine a view is obtained from the extremity of the forest, called *Teniet-el-Guetran*, without the necessity of climbing so high. Near the "Rond Point" is a chalybeate spring, whose

waters have been found very efficacious ; it yields 8000 litres per hour.

There is a very fine view of the forest range from Bou-Zhouar, 4593 feet, the conspicuous conical mountain N. W. of the fort, and an equally fine one of the valley of the Chélif from Bou-Sar, 4266 feet, the N. point of the range W. of Bou-Zhouar.

The road to Tiaret has been commenced, but never completed.

About 25 m. south of Teniet, at the point where the Tell ends and the High Plateaux commence, is a district called *Sersou*, rather uncertain in its extent, abounding in prehistoric remains, such as large flat blocks of stone, *enceintes*, and tumuli, which are found on the plain, on the slopes and summits of the hills and in the valleys between them. These are mentioned in no work of travels, as they are rather out of the beaten track, but a preliminary survey was made of them by the late Messrs. Letourneux and MacCarthy, and it is to be hoped that a more careful examination may be undertaken. At *Atm-Toukria*, an immense surface, about 700 acres, was entirely covered with *enceintes* formed of walls of rough stones and tumuli, and a considerable number of interesting objects were discovered belonging to the ancient races which had inhabited the country.

ROUTE 6.

Algiers to Tizi-Ouzou and Fort National.

The journey is done by railway as far as Tizi-Ouzou, and thence by carriage or public conveyance. The line was completed in June 1888.

Algiers to Ménerville. See p. 164.

kil.		kil.
..	MÉNERVILLE	58
7.	Blad-Guitoun	46
11.	Les Issers	42
16.	Bordj Menaïel	37
28.	HAUSSONVILLERS	25
36.	Camp-du-Maréchal	17
43.	Mirabeau	10
53.	TIZI-OUZOU . . . . .	..

7 kil. (from Ménerville), *Blad-Guitoun* (pop. 385), the "land of tents," a thriving village on an elevated position.

11 kil. *Les Issers*. This stream is one of the longest in Algeria, having a course of about 130 m. Close by is the *Souk el-Djemâa* or *Les Issers* (the Market of Friday), a large caravanseraï on the right bank of the river. There is an Arab market every Friday, as the name implies.

[There is an excellent road hence to the village of *Dra el-Mizan* (pop. 1841), and an omnibus runs every day, passing through.

1½ kil. *Isserville* (pop. 308), situated on the brow of a hill, with a beautiful view of the plain in every direction.

13 kil. *Chabel el-Ameur*. Pop. 169. Wayside inn. The pass from which the village derives its name is at a little distance to the E. The village itself is 1½ kil. to the W. of the road.

29 kil. *Tizi Reniff*. Pop. 163.

35 kil. *Beauprêtre*, formerly called *Bou Faïma*. Pop. 547.

39 kil. *Dra el-Mizan*. See p. 167.]

16 kil. *Bordj Menaïel* (pop. 3049), burnt by the insurgents in 1871.

28 kil. **Haussonvillers**, formerly called *Azib-Zamoun*. Before the insurrection of 1871 there were only a caravanseraï and a few scattered houses at this place; these were burnt and the caravanseraï besieged for 23 days; thanks, however, to the loyal conduct of the Amin el-Omina, who himself assisted to defend it, the building, containing 32 Europeans, held out till relieved by General Lallemand.

Now a flourishing village has been created, occupied partly by families from Alsace and Lorraine.

The situation of this village is exceptionally good; it is at the junction of the roads to Dellys and Tizi-Ouzou. There is an abundant water supply, and the soil is exceedingly fertile; 5510 hectares of land have been allotted to its inhabitants.

After passing this point the line enters the valley of the Sebaou, which is *par excellence* the river of Kabylia, and drains nearly the whole of the Djurdjura range. It is called by several names, according to the district through which it flows, as is customary all over Algeria. It has a bar at its mouth like nearly all Algerian rivers, and cannot be used either for navigation or for floating timber, as during the rainy season and the melting of the snows it is an impetuous torrent, and in summer a mere thread of water.

36 kil. *Camp-du-Maréchal* (pop. 204), a small village to the S. of road, where was formerly a Kabyle village called *Dra-bin-Kadda*.

On the opposite side of the river to the N. is *Bordj Sebaou*, the ruins of a Turkish fort.

43 kil. *Mirabeau* (pop. 632), formerly *Bou Guelfa*, a village created by M. Dolfus, the well-known manufacturer of Mulhouse, who removed all his establishment to France after the annexation of Alsace and Lorraine to Germany.

53 kil. *Tizi-Ouzou* (pop. 1290; the gorge of the broom plant), 843 feet above the sea. It is the chief place of an arrondissement comprising the territories of Dellys, Dra el-Mizan, and Fort National, administered by a sous-Préfet.

Tizi-Ouzou, which was a village of about 60 houses before the insurrection of 1871, was then entirely destroyed. It has been rebuilt on a much larger scale.

At a distance of several kil. are the villages of *Tamouda* and *Mekla*, inhabited by the *Oulad ou Kasai*, an ancient family, which had supplied several Bach-Aghas for the circle of Tizi-Ouzou. The last chief, Ali ou Mohammed ou Kasai, had exercised the functions of Kaid up to the moment when that office had been suppressed to make room for the appointment of elected Amins. He then retired into private life, but his influence continued as great as ever over his tribe. It was he who took the lead in the insurrection in this part of Kabylia. He

plundered and destroyed the village and all the neighbouring farms, cut off the supply of water, and blockaded the fort from the 17th of April till the 11th of May. He was joined by Bin Ali Cherif, who, though he did not take any active part in the siege, lent to it the prestige of his name. Eighteen of the defenders died during this time, and seventeen were wounded.

The Kabyle and French villages are still as they were, quite distinct; to the N. of the village stands the Borj, or fort, originally built by the Turks on Roman foundations, and subsequently enlarged and occupied by the French in 1855.

For grandeur of scenery no part of Algeria can compare with Kabylia, and none of it is finer than the Kabylia of Djurdjura. The traveller is particularly struck with the picturesque situation of the villages which crown the heights of the sharp spurs branching from the main range. The white minaret of a mosque usually towers above a cluster of red-tiled cottages. These have neither chimneys nor windows, and are built of mud and stones. The shape of the village is generally long and narrow, necessarily following the configuration of the ground on which it is built; and partly owing to the necessity, before the French conquest, for easy defence, every village is a fortified position, with the mosque as a citadel. The amount of cultivable land in Kabylia, also, is hardly more than sufficient for the wants of its population, this is another temptation to build their villages on the barren crests of the hills, so as to utilise every spot available for cultivation.

The door, the only aperture capable of affording light or air, is so low as to compel a man of average height to stoop on entering, and is placed in the middle of one of the longest sides; the single room is divided into two unequal portions by a low parapet wall, part being the sleeping-room of the family, and the smaller portion being devoted to their cattle. The partition serves as a shelf on

which to place jars of dried fruit, flour, etc., and above the stable is a loft for fodder. A small hole at the farthest corner serves as the family cooking-place.

Under these circumstances, it is wonderful that they can preserve life at all; the stench of the stable, the smoke of the kitchen, the want of a proper supply of air and light, are conditions which set all hygienic laws at defiance, and doubtless give rise to much avoidable sickness and death. In every village there is a building, the *Jemâa*, which supplies the place of a club in more civilised states of society. It is usually placed at the entrance, and consists of a large hall with stone benches round the sides; here the men come to take their siesta, to discuss the affairs of the village, the latest political news, or the scandal of the day. The villages are generally filthy in the extreme, and reeking with foul odours of every kind, accumulating from generation to generation. One never enters a Kabyle village without a feeling of regret that they cannot adopt the migratory habits of the Arabs, and remove sometimes to "fresh fields and pastures new."

The Kabyles are exceedingly industrious, and frequently amass considerable property. They are very jealous of their wives; and, if report lies not, the latter have been known to give occasion for the feeling.

[A road has been commenced from this place to Bougie; it bifurcates about 3 kil. from Tizi-Ouzou, and follows the right bank of the river Sebaou.

4 kil. The road crosses, by a bridge, the picturesque gorge of the Sebaou.

21 kil. *Tamda*, a new village of 25 houses built on land once the property of Oulad ou Kasai, sequestered after the insurrection.

23½ kil. The road to the new French village of Mekla turns off to the right and crosses the Sebaou by a large bridge. On the left bank of the river may be seen the ruins of the

Kabyle village of Mekla, destroyed during the insurrection.

28 kil. *Talet Mizeb*. Here, near a fountain and a clump of orange trees, the inhabitants of old Mekla were located when their village was destroyed. On the left of the road, at a distance of 2½ hours, in the hills, is the village of *Mira*, where one of the new Franco-Kabyle schools has been established.

37 kil. *Azazga* (pop. 416), a prosperous village, residence of the administrator of the district, in a country well adapted for vines, and abounding in olive trees. There is a small auberge where a traveller can sleep in tolerable comfort. The road hence to Bougie passes through some of the finest scenery in the country.]

From Tizi-Ouzou the ascent to the Fort must be made by carriage.

110 kil. from Algiers. The road crosses the *Oued Aisai*, an affluent of the Sebaou, and frequently impassable after heavy rains.

The distance from Tizi-Ouzou to Fort National is about 17 m. The military road between the two places was made by 30,000 French soldiers in a remarkably short space of time, and is one of the most beautiful in Algeria. It leads at first over green cultivated hills and valleys; but as Fort National is approached, and the Djurdjura range entered, the scenery becomes exceedingly grand and striking. Many spurs of the Djurdjura are crossed, as the road winds up the mountains; till, in about four hours after leaving Tizi-Ouzou, the Fort is reached, which was seen an hour previously as a white speck high up on the mountain side.

131 kil. **Fort National** (pop. 9434), formerly called Fort Napoleon; in Arabic "Souk-el-Arba," meaning the market of Wednesday. 3153 feet above the sea.

This place is situated almost in the very centre of Kabylia, and is in reality a walled and fortified town, rather than a fort. The walls are about 14 feet high, and entrance is gained

by the gates of Tizi-Ouzou and of Djurdjura.

In the insurrection of 1871, the garrison supported with courage and endurance a siege of sixty-three days; it was finally relieved by General Lallemand about the middle of June.

The actual citadel is placed on the highest point, and commands the rest of the fort. It was built after the insurrection of 1871, and contains barracks, the arsenal, and other subsidiary military establishments. Water is brought from some distance by means of an aqueduct, which fills a central reservoir, whence it is distributed to the various buildings. Fruit trees are much cultivated outside, and a kitchen garden for vegetables is kept up by the soldiers.

The fort was built by the French in the year 1857, after a long and sanguinary struggle with the tribes of the *Ait-Iraten*, who were the original inhabitants of this district. The first stone was laid by Marshal Randon on 14th June 1857, and five months afterwards it was completed.

There are very few villages in Kabylia situated at a greater elevation than Fort National; the highest of all is *Ait-bou-Yoosuf*, 3876 feet above the sea.

The view from Fort National is magnificent. Towards the S. is the splendid mass of the Djurdjura, frequently capped with snow; and in the opposite direction lies the valley of the Sebaou, beyond which are ranges of low wooded hills bounded in the distance by the sea.

The highest part of the Djurdjura chain is *Tamgout Lalla Khadidja*, the peak of the Lady Khadidja, 7542 feet above the sea. It is usually covered with snow from November till May, when it is quite inaccessible, but during summer a laden mule can cross it without difficulty. The crest is entirely barren, save here and there, where a group of cedars have been able to find soil enough in which to take root; but in the valleys and lower spurs fine rich pasturage springs up after the melting of the snow.

[Excursions from Fort National.]

1. The villages of the **Beni Yenni**. This may be made on foot or by mule in a day, returning to sleep at Fort National, or on to Michelet. Follow the carriage road beyond the fort as far as kil. 7. There a steep path descends to the right, crossing the *Oued Djemäa*, and mounting to the villages of the Beni Yenni, which are situated along the crest of the mountains, and are conspicuous by the presence among them of one of the Franco-Kabyle schools. They are four in number—*Ait-el-Ahsan*, *Ait-el-Arbäa*, *Taourirt Maimon*, and *Taourirt-el-Hadj*.

This tribe is celebrated for the manufacture of that Kabyle jewellery so much prized by strangers. It used invariably to be made of silver, but of late years base metal has been substituted. Kabyle jewellers have never worked in gold. Two descriptions are usually made, one enamelled and the other plain, or only ornamented by the admixture of small pieces of coral.

Another interesting Kabyle industry is the manufacture of pottery. This is always made by the women, and as such a thing as a potter's wheel is unknown, each separate piece is moulded by hand and in the most grotesque possible manner. Still great taste is sometimes shown, and the forms in daily use are no doubt the tradition of Roman and Punic art. Two colours only are used in decorating them—red ochre and black peroxide of manganese, which both retain their colours after baking. A vegetable varnish is then rubbed in to give lustre to the vessel. The intricacy and diversity of design are really astonishing, and each village has its distinctive type.

They also make arms of various kinds, and folding book-stands cut out of a single piece of wood, sometimes inlaid with tin, and tastefully carved.

2. The traveller should not fail to visit the village of **Icherridhen**, the road to which used to pass over the

ridge of a scarped isthmus, beyond which was the village surrounded by gardens. This configuration of ground made it a formidable military position. During the first expedition against Kabylia, in June 1857, the Kabyles, who had covered the slopes of the hill with intrenchments, held it for several hours on the 24th against all the attacks of the French troops. The division of General de MacMahon tried in vain to take it by assault; Bourbaki was wounded there at the head of his Zouaves; and the issue of the affair was getting serious, when the 2nd foreign regiment rushed up the steep slopes on the left of the Kabyle position with singular intrepidity, and took it in reverse. The remains of the French who fell in this action have lately (1895) been discovered, and buried under an obelisk.

During the insurrection of 1871, Generals Lallemand and Cerès, after having relieved Fort National, found the Kabyle forces intrenched at Icheridhen in a more formidable manner than before; but this time its defenders had to contend against the French chassepots and mitrailleuses, and being attacked on both flanks they had to disperse without being able to carry off their numerous dead, which they had laden on mules.

3. To the N. of Fort National an excursion may be made to *Djamäat-es-Saharidj*. The most picturesque road passes by *Tizi-Rached*, where there is one of the Franco-Kabyle schools, and thence to the French village of *Mekla*, where the traveller can sleep at a fairly comfortable auberge. The Kabyle village of *Djamäat-es-Saharidj*, or market of Friday, and of the reservoirs, derives its name from the weekly market held here, and from two old Roman reservoirs under a fine spring in the centre of the village. This was the Roman *Bida Colonia*, and vestiges of Roman masonry, pavements, columns, etc., are seen in every direction. It is an extremely salubrious and beautiful spot, recalling some of the finest villages of Mount Lebanon. For this reason it has been selected for one of

the Franco-Kabyle schools, which are likely to produce much good in the mountains. There is also an establishment directed by the Père Blancs (see p. 111) and an English Protestant mission. The neighbouring village of *Mekla* may be reached by carriage from *Tizi-Ouzou*, from which it is 20 kil. distant.

4. In fine weather, and when there is no snow on *Djurdjura*, the traveller can cross from Fort National by the *Col de Tirourda* or the *Col de Chellata* to the Oued es-Sahel. He should sleep at *Michelet*, the chief place of the *Commune Mixte* of *Djurdjura* (pop. 41,472), 21 kil. from the Fort, from which place he can do either journey in one day on mules. The former route will land him at *Maillot* or *Beni Mansour* on the line of railway between Constantine and Algiers, the latter (described at p. 257) at *Akbou* on the line between *Beni Mansour* and *Bougie*. It is the longer and the more fatiguing of the two, but incomparably the more beautiful. Both, however, are grand throughout, especially in early summer, when the ground is carpeted with wild flowers.]

ROUTE 7.

Algiers to El-Aghouat, through the Gorge of the Chiffa, Médéa, and Boghari.

This is a most picturesque and interesting journey. Many of the views, such as that of the high peaks of the Atlas from Mt. Nador; of the valleys of Médéa and the Chélif from the Dakla; of the upper valley of the Isser, with *Djurdjura* in the distance, from Ben Chicao; of the Hauts Plateaux from Boghar; of the Sahara from El-Aghouat, are hardly to be surpassed. But it is far more fatiguing than the journey to Biskra, and should on no account be attempted by persons in weak health, or by those who

are not well inured to laborious travelling.

The first part of the road will naturally be done by railway; the following is the itinerary:—

Distance from Blidah.	Names of Stations.	Distance from Berrouaghia.
kil.		kil.
..	Blidah	84
12	Sidi Madani	72
19	Camp des Chênes	65
81	Mouzaïa-les-Mines	53
45	Lodi	39
50	Médéa	35
52	Damiette	32
59	Hassen-ben-Ali	25
71	Ben Chicac	13
84	Berrouaghia . . . . .	..

[Many travellers will hardly be content with going through the **Gorge of the Chiffa** by train, but will make a separate excursion to it by carriage.

The road leaves **Blidah** by the gate Bab-es-Sebt, and runs parallel to the railway, through the plain of the Metidja, for about 4 miles, as far as the wide and almost waterless bed of the river Chiffa, which is here crossed by an iron bridge. The small village of *Chiffa*, seen on the right, was almost destroyed by an earthquake in 1867. A short distance beyond the bridge the road divides, that to Milianah and Cherchel continuing straight on through the plain, while that to Médéa and El-Aghouat turns to the left, and 2 miles farther on reaches the

Gorge of the Chiffa, a tremendous rent in the mountains extending for a distance of 10 m., through which flows the small river Chiffa. The peak seen on the right, before entering the Gorge, is Djebel Mouzaïa, 5350 feet. The view looking back over the plain and distant hills is extremely beautiful. The sides of the Gorge are completely clothed with luxuriant vegetation, reaching to the summit of the surrounding mountains, save where in places the road is overshadowed by sheer precipices many hundred feet in height, down the faces of which numberless small streams fall

in showers of spray. The road itself is a wonderful piece of engineering, being blasted out of the solid rock for almost the entire distance, in some places carried high up the face of the cliff, and in others built out in the actual bed of the stream. It was executed by French military engineers, and was only completed in 1855, previous to which there was no direct route between Blidah and Médéa.

There is a small *Inn* at the *Ruisseau des Singes*, where refreshment may be procured. The *Ruisseau des Singes* is a picturesque stream tumbling down a steep gorge on the left bank of the Chiffa. Behind the inn a steep path leads up to a garden. The vegetation is rich and beautiful, and ferns and lycopodiums grow in great profusion, mingled with olive, bay, lentisk, juniper, and tree-heath. Apes are frequently to be seen, sometimes in great numbers.

A few hundred yards lower down the valley, on the opposite side of the road, or rather in the face of the cliff which supports the road, is a beautiful stalactitic cave: the key of the door is kept at the auberge.]

19 kil. *Camp des Chênes*. Here the Gorge of the Chiffa may be said to end.

31 kil. The road to *Mouzaïa-les-Mines*, sometimes called *Ville-les-Mines*, after the late Inspector-General of Mines, branches off. The copper mines are in the mountain behind the village.

45 kil. *Lodi*, a thriving village in a rich and well-cultivated country.

50 kil. **Médéa**. Pop. 3926. Médéa is supposed to stand on the site of the Roman town *Medic* or *Ad medias*, so called because it is situated half-way between *Berrouaghia* (*Tanaramusa Castra*) and *Amoura* (*Sufasar*). Under the Turkish Government it was the capital of the Beylick of Titeri, which comprised all territory under Turkish rule outside of Algiers.

The last Bey, Bou Mezrag, offered his services to the French immediately after the capture of Algiers; but shortly afterwards he betrayed his trust, and General Clauzel proceeded

to Médéa to install a new one of his own selection, Mustapha bin Omar; the old Bey was interned at Blidah. His son, however, obtained permission to rejoin the rest of the family, and immediately commenced to rally the most influential Arabs of the Beylick around him, and against the nominee of the French authorities. To support the latter, Gen. Berthozène proceeded to Médéa in June 1831, at the head of 4500 men. The son of Bou Mezrag fled southwards, and was pursued by the French as far as the plateau of *Aouarat*, burning the harvest and cutting down the trees on their route. On their return to Médéa, Bin Omar represented that after such conduct it would be impossible for him to remain without a military force for his protection. This the general refused to leave, and the Bey quitted the city with the French troops.

Médéa, thus left to itself, submitted, first to the Bey of Constantine, subsequently to Abd-el-Kader, and finally to the Duc d'Aumale in 1840, who shortly afterwards was appointed commandant of it.

Médéa, finely situated on a plateau 3070 feet above the level of the sea, is surrounded by a wall pierced by five gates, which was rebuilt by the French after the siege. The town is entirely French in character, and has nothing of particular interest to attract the stranger.

To the E. of the town is an ancient *Aqueduct*, consisting of two tiers of arches, of which the lower are partly filled up, while the upper ones are left open, built into the wall of the town by the French. The water was conveyed in it from Djebel Nador. The present supply is derived from the same hills, but from a source farther W. The date of the aqueduct is unknown.

The climate of Médéa, owing to its great elevation, is temperate and healthy. The vegetation is rather European than African,—apples, pears, gooseberries, currants, etc., growing in great perfection.

A pleasant walk from Médéa is to the *Piton du Dakla*. The view is

indescribably beautiful, the country green, and well cultivated. There are some curious piles of sandstone blocks on the spur of Nador, which overlooks the valley of Médéa; they are said to be Roman, but are probably later. Near them is the foundation of a circular structure of a different age.

The line leaves Médéa W. and follows the mountains, which sweep in a grand curve in a S. E. direction, round the head of the valley into which the plateau of Médéa projects. These mountains are remarkable for the total absence of all trees or scrub, or indeed any vegetation except short grass.

52 kil. *Damiette*.

59 kil. *Hassen-bin-Ali*.

71 kil. *Bin Chicao*. At a distance of 3 kil. from the station is the Agricultural and Industrial School for the *Enfants assistés de la Seine*. The most promising of these are selected at Paris and sent here; they eventually have gratuitous concessions of land given to them.

84 kil. *Berrouaghia*. Pop. 1592. At a few kil. to the E. are some thermal springs, acidulated and ferruginous. On the left of the road are the remains of the Roman station *Tanaramusa Castra*, on the road from Anzia (*Aumale*) to Rubrae (*Hadjar er-Roum*), near Tlemgen; it is here that the road to the first place still branches off; it is quite practicable for mules. About 1000 prisoners are located here; they used to be let out to colonists, but this was found inconvenient, and they are now utilised in planting vines; they inhabit the old smala, and 900 hectares of land are appropriated for the use of this establishment. The railway stops here, and the rest of the journey must be done by diligence. The kilomètric distances of the following stages are measured from Algiers. After passing the village the road ascends the hills which separate the valley of the *Oued el-Hammam* from that of the *Chélif*.

133 kil. Inn of *Aïn-Maklouf*; lodging may be had; good food. Diligence stops for breakfast.

140 kil. The road descends by a series of rapid curves, and crosses the

broken gullies that occupy the right bank of one of the affluents of the Chélif. The groups of Aleppo pines are splendid; cultivation plentiful where practicable.

145 kil. Inn of *Ain-Moudjarar*, or *le Camp des Zouaves*, a detachment of which corps was formerly employed in making the road here.

155 kil. Road disengages itself finally from the hills, enters the green valley of the Chélif, bare of trees, and crosses

157 kil., the *Oued Hakoum*, by a bridge close to a substantial farm called *Oued Bouktena*; near the *Oued Hakoum* is *Ain-Moudjébar*, a large smala where Spahis were quartered before the insurrection of 1871. It is now a model sheep farm.

After this the road passes along the right bank of the Chélif to

166 kil. **Boghari**, more correctly *Bokhari*, on right bank. Pop. 2873.

The water here is impregnated with sulphate of magnesia, and is slightly purgative. The market held on Mondays is important.

The Arab town stands on a spur of the hill facing the S.W.; below are the hotels, school, telegraph office, pharmacy, gendarmerie, etc.

The view of the opposite heights of *Boghar* is extremely fine. *Boghari* is a grand *depôt* for articles of Arab manufacture, burnouses, embroidered leather, etc., and of the trade generally, between the Tell and the Sahara; excellent *bain Maure*.

Between *Boghari* and *Boghar* (pop. 2392), the military station, the valley is very narrow, but it soon expands towards the S., and is shut in by low ridges of limestone, furrowed deeply, as if by streams or heavy rains. The Chélif winds below it in a bed 50 feet below the surface, worn through the sandy soil. Beyond the boundary hills is the first steppe of the High Plateaux, a vast level waste of a dull brown colour. It is bounded to the S. by a range of low mountains, amongst which seven sugar-loafed peaks—*Sébâa-Rous*, in Arabic—are prominent.

Boghar was chosen by Abd-el-Kader

as a suitable place for a military establishment; and Berkani, his khalifa, founded a large fort, which was destroyed in 1840 by the French, who definitely occupied the place in 1841. It stands at an elevation of 2940 feet above the sea level, on the side of a mountain; and is divided into two distinct parts, consisting of the Fort, which encloses all the military buildings, and the village, which is situated below the Fort, on the road to *Boghari*. There are some pretty gardens under the cliff, watered by numerous springs, which gush out from beneath the rocks. Outside the Fort is a forest of junipers and pines.

175 kil. *Aïn-Saba*. After leaving *Boghari* the road traverses the plain of the Chélif, and then engages itself amongst the hills that appear once to have formed a basin to that river, but through which it has broken. The road made in 1868 is excellent, metalled and kept in order by regular cantonniers.

184 kil. A very fine view of the first steppe of the High Plateaux lying spread out beneath. A gentle descent leads to

185 kil. *Bou-Ghazoul* (Father of Gazelles), caravanserai, excellent accommodation, situated in a plain of dry soil, with a few patches of grass among wide patches of sand. A good deal of corn is grown in favourable seasons. In spring the ground is beautifully carpeted with wild flowers. The traveller is pretty sure to see fine examples of mirage between *Bou-Ghazoul* and *Ain-Oussera*.

After leaving *Bou-Ghazoul* the road is very bad in some places.

222 kil. Caravanserai of *Aïn-Oussera*, poor accommodation. It stands on a slight eminence, with a scanty spring close to it, and a few stunted trees. Beyond this the ground is covered with alfa as far as the eye can reach in all directions.

241 kil. *Bou-Cedraïa*, an assemblage of huts used for the collection of alfa.

282 kil. *Guellet-es-Stel*, a fairly comfortable caravanserai, built by Marshal

Randon in 1853. No water save such as is stored in a cistern. Leaving this the road leads up the valley by a continuous ascent; then, rounding the hills to the left, it enters a plain which may be said to form the second steppe of the High Plateaux. For the first few miles the road is very marshy; to this succeeds a vast plain of sand, covered with scanty vegetation. Between this and the next caravanserai the road passes between the two large shallow salt lakes called *Sebka Zahrez*; the larger one, that to the E. of the road, is about 25 m. long by 10 broad. It is a curious fact that some springs of perfectly fresh water rise within the circumference of these salt lakes.

288 kil. *El-Mesran, caravanserai du banc de sable*. The water here is too much impregnated with magnesia for drinking purposes. It is close to one of the largest of the dunes, on which there is a scanty vegetation of tamarisk and broom. Thence the road descends, passes a large Arab cemetery with two koubbas, fords the *Oued-Melah* (salt river), and ascends the opposite hill, on which is

302 kil. The caravanserai of the *Hadjar-el-Melah*, or *Rocher de Sel*; also a very nice inn lower down, in a garden of poplars, willows, canes, etc. At the former there are no conveniences for lodging or obtaining a meal. At the latter the diligence stops one hour for breakfast, so that by providing himself with food, and eating it in the carriage, the traveller can leave the vehicle at the rock, and take a hasty survey of it. The *Rocher de Sel* is a jagged bare mass of hills, without a trace of vegetation. The stream is perfectly sweet before reaching it, but soon becomes impregnated with salt. The diameter of the salt rocks is about half a mile; they are covered with a *débris* of blue slaty clay, fragments of limestone, and crystals of gypsum. The fragments of stone upon the mountain present a remarkable variety of colours, including red, yellow, orange, green, black, violet, etc.; small particles of iron pyrites are also common. The per-

colation of water through this has formed deep circular holes, the sides of which are honeycombed, and lined with glittering stalactites of salt. The traveller should be cautious in ascending the rock, as the edges of the pits are generally steep, and the pits themselves often of considerable depth. The cliffs and pinnacles of salt are most picturesque when seen from the stream, but the structure of the mass is best seen on the opposite side, where it has been quarried by the Arabs. On all sides trickle forth small streams, the banks of which are covered with crystals, which sometimes even arch over the water. This is one of the five mountains of salt mentioned by Herodotus as existing in the interior of Lybia.

From this point the country alters; as the road ascends the *Djebel Sen-el-lebba* the spurs of the mountain are covered with alfa, and there is little wood to be seen except on the heights, where there are oaks and pines.

318 kil. *Ain-Ouerrou*, a small auberge, with a fountain and garden. Soon a large Government mill is passed on the left, to turn which the water is dammed. Hereabouts the sandstone rocks are a curious conglomeration of petrified straw, stalks of plants, and other vegetable productions.

329 kil. *Djelfa*. Pop. 1078. The town, which is 3792 feet above the sea level, stands under the highest Col of *Djebel Sen-el-lebba* (the lion's tooth), the wood-crowned ridges of which are seen high on the right. The town consists of two streets at right angles to each other, planted with trees, and has a very neat appearance. Many Roman remains have been found here. At about 6 kil. N. of the village, close to a mill called *Moulin Randon* or *Moulin Mein*, there is a very large necropolis of megalithic tombs. In the neighbourhood is the great forest of Tadmitz, where there is a post of Spahis. On account of the height and exposed position of Djelfa, it is subject to the greatest extremes of temperature, intense heat in summer and great cold in winter.

352 kil. *Oued Sedeur*. The traveller

can spend the night very comfortably here and procure good food.

367½ kil. *Atn-el-Ibel* (Fountain of the Camel). Caravanserai badly kept. The neighbouring *Hôtel du Roulage* excellent. Hereabouts was found the *rat à trompe*, a rat with long hind legs and a snout, of which Canon Tristram tells this amusing story: "When the species was first discovered, General Vaillant offered rewards to his soldiers for specimens, and was promptly supplied with other desert rats, to the end of whose noses pieces of their comrades' tails had been ingeniously affixed. Some of the specimens were actually sent to Paris before the trick was discovered." Horned vipers also are common amongst the tufts of alfa. Their bite is fatal. This is the only venomous snake in Algeria.

The road beyond this lies across a plain of alluvial deposit, capable of growing an unlimited supply of cereals, but little cultivated.

387½ kil. A ruined inn close to where the *Mokta-el-Oust* is crossed by a stone bridge of two arches.

399 kil. Caravanserai of *Sidi Maklouf*, from which there is a very beautiful view; there are remarkable beach lines along the ridges to the left. The caravanserai is fairly good, and stands picturesquely on a bare shelf of rock, with a steep cliff to the S., beneath which is a well-cultivated garden. There is also a little inn farther down, where the horses are fed. Near the former is the *koubba* of *Sidi Maklouf*, with a group of palms near it. Thence the road crosses a bridge, and then winds over numerous ridges, and descends into the bed of many a dry watercourse. The road now lies to the left of *Djebel Zebecha*, at the foot of which is a lake, dry in summer.

424 kil. *Melliti*. A small and poor-looking caravanserai, with accommodation for six persons.

Presently an opening is seen in a range to the right, and beyond it an isolated hill of a remarkable shape, called *le Chapeau du Gendarme*. Thence, after traversing a plain of loose sand, a small auberge is reached.

Soon vegetation begins to appear; the dark palms open out, beyond which some of the buildings of El-Aghouat become visible. The *vieux camp* is passed on the right, and then, passing down a long straight road between high mud walls, the city is entered by the *Porte d'Alger*.

441½ kil. **El-Aghouat** (erroneously spelt *Laghouat*). Pop. 4009, exclusive of a garrison of 1500 men.

El-Aghouat was taken by storm 4th Dec. 1852, by General Pélissier, after a severe combat, in which more than 2000 of the natives perished. In this battle Generals Bouscarin and Morand were mortally wounded.

El-Aghouat is a very ancient city; it formerly belonged to Morocco, by whom it was ceded to the Turks about the end of the 17th century; it changed hands frequently, being sometimes governed by the Beys of Titeri, and sometimes by those of Oran, but the real power always remained in the hands of a *Jemaa* or council, presided over by one of the local *Marabouts*.

It is 2437 feet above the sea level, and has, in consequence, a climate nearly as cold as Djelfa. In fact, it is always cold in winter, when it frequently rains, and sometimes snows. The summers are much less oppressive than at the lower oases, such as Biskra. The town lies between two summits of a limestone ridge, bending N.E. and S.W.; the height to the N.E. is crowned by a barrack and the *koubba*, that of *Sidi Maklouf*; the height to the S.W. by the *koubba* of *Si el-Hadj Aissa*, also the military hospital, powder magazine, etc.

The latter saint was distinguished alike for his virtues and for the gift of prophecy which he is said to have possessed. In the year 1714 he foretold that the French should take Algiers, that they should encamp under the walls of El-Aghouat, and that they should even extend their power as far as the *Oued el-Ahmar*. This document was actually in the hands of General Marey, and one of the descendants of the *Marabout* recited it to that General shortly after the siege. On a lower

eminence between these two is the new mosque.

The palm gardens, containing 21,000 date trees, extend in a curved line from near the point where the supply of water begins, from the Oued Djidi (*la prise d'eau*), broadening as it goes up to the town, and again on the other side they stretch into the desert. At their S.E. corner is the Arab cemetery; there is another Arab cemetery, in a wild situation, on the S.E. of the town, in the desert, about half a mile from the gate; near this is the Catholic cemetery. The military establishments are outside the town to the N.W.; farther to the north is *le vieux camp*, which deserves a visit in detail; the whole was constructed at different times by the men themselves. The origin of the name *Rocher des Chiens* is as follows: When El-Aghouat was taken by the French, a considerable number of Arab houses were mined, and many of the inhabitants killed; their dogs, to the number of 200, took refuge on this hill, whence they descended at night on predatory excursions; finally, it was found necessary to have them destroyed by the soldiers.

In the centre of the town is the *Place Randon*, where is the residence of the general, the military cercle, with a beautiful garden, the Bureau Arabe, post-office, etc. There is an excellent *bain Maure*. The modern French town, with its fortifications, has been constructed with reckless disregard of the Arab houses and gardens. There are several dependent oases near El-Aghouat; one of these is *El-Assafia*, 10 kil. N.E., the houses of which are built of stone, held together by mud. It has a stream rising suddenly out of the sand in a deep bed overhung by oleanders.

An excursion may be made to the *Col de Sable*, a pass over the mountains W. of El-Aghouat, about 1½ m. from the town. From it there is a fine view of the oasis; and on the other side of the valley between the two ranges, and part of *Djebel Amour*.

It is not within the scope of this work to give itineraries for the desert of Sahara; but it would be incomplete without a short notice of the country of the M'zab, which is now annexed to Algeria. It consists of five oases in close proximity to each other: GHARDAIA, *Beni-Isguen*, *El-Atouf*, *Melika*, and *Bou Noura*, and two isolated oases farther N., BERRIAN and GUERRARA; the population consists of 40,000 inhabitants, and they possess 200,000 date trees. Until 1882 they enjoyed perfect independence, though paying a certain tribute to France; but in virtue of a decree dated 28th December 1882, their country was annexed to the French possessions, and they became subject to the same laws as govern the other native races under military rule.

GHARDAIA (pop. 8709), 180 kil. from El-Aghouat, is the capital of the confederation, and it is there that the military commandant resides. The town is picturesquely situated on the side of a hill, crowned by the mosque; from this point a fine view is obtained of the 8000 date trees which this oasis contains. Two walls divide the interior of the town into three quarters. The centre one is occupied by the M'zabi themselves, a proud, exclusive, but active race, entertaining only commercial relations with the occupants of the other quarters. The eastern portion contains about 300 Jewish families, and that to the west is occupied by the *Medabiah*, or Arabs from *Djebel Amour*. The gardens belong exclusively to the M'zabis. *Melika* is not more than a kil. distant; it is considered the *Royal* or Sacred City of the confederation, but is in a poor and neglected condition.

Beni-Isguen (pop. 5189) is 2 kil. from Ghardaia, and is the principal *entrepôt* for European goods. It is surrounded by a curious walled line of defence. The irrigational works are exceedingly interesting and worthy of examination.

A little farther on is *Bou Noura* (pop. 1126), the luminous. *El-Atouf* (pop. 1549). It is the

only one of the oases that can boast of two mosques.

BERRIAN (pop. 2811) is 36 kil. N. of Ghardaia; it is small but well built and abundantly watered; is surrounded with a wall flanked by towers, built of round water-worn stones embedded in mud; its gardens contain 30,000 date trees.

GUERRARA (pop. 3732) is 60 kil. from Ghardaia, and it is undoubtedly the most curious of all. Its streets present an air of comfort and even luxury, which one hardly expects to find in the Sahara. The inhabitants are exceedingly hospitable, and the presence of numerous caravans coming from and going to Ghardaia and other places, give it an air of prosperity and commercial activity.¹

¹ For a good account of this country consult an article by Captain Coyne in the *Rev. Afr.* 1879, vol. xxiii. p. 172; also a brochure by Commandant Robin, *Le M'zab et son annexion à la France*, Alger, 1884. 8vo, pp. 47.

ROUTE 8.

Algiers to Constantine by Railway.

Distance in Kil. from Algiers.	Names of Stations.	Distance in Kil. from Constantine.
..	Algiers	464
2	Agha	462
6	Hussein Dey	458
11	Maison Carrée (junction)	453
16	Oued Smar	448
19	Maison Blanche	445
26	Rouiba	438
31	Réghaia	433
39	Alma	425
42	Corso	422
49	Belle-Fontaine	415
54	Ménerville (junction)	410
61	Souk-el-Haad	403
65	Beni-Amran	399
77	Palaeastro	387
88	Thiers	376
99	Omar-Dra el-Mizan	365
123	Bouira (Buffet)	341
137	El-Esnam	327
150	El-Adjiba	314
162	Maillet	302
169	Beni-Mansour (junction)	295
186	Les Portes de Fer	278
201	Mzita	263
210	Mansoura	254
226	El-Achir	237
239	Bordj bou-Arreredj	225
246	El-Anasser	218
254	Chénia	210
263	Ain-Tassera	201
271	Tixter	193
283	El-Hammam	181
296	Mesloug	168
303	Setif (Buffet)	156
322	Ras el-Ma	142
339	St. Arnaud	135
352	Bir el-Arch	112
367	St. Donat	97
384	Mechta el-Arbi	80
403	Telergma	61
427	El-Guerrah (junction)	37
436	Oulad Rahmoun (junct.)	28
448	Kroub (junction)	16
453	Oued Hamimim	11
460	Hippodrome	4
464	Constantine . . . . .	..

2 kil. *L'Agha.*

6 kil. *Hussein Dey.*

11 kil. *La Maison Carrée* (see p. 111).

Bifurcation of the line to Oran.

16 kil. *Oued Smar.* To the north of the line is the property of the late M. Cordier, where there is a complete collection of all the species of eucalypt-

tus and other Australian trees, which have been introduced into the colony.

19 kil. *Maison Blanche*. Pop. 2450. The nearest station for Fonduk and the Barrage of the Khamis (see p. 112).

26 kil. *Rouiba*. Pop. 2602. There is a Government School of Agriculture here. The road to *Ain-Taya* branches off to the N.

31 kil. *La Réghaia*. Pop. 1275. The line now takes a north-easterly direction, and enters the forest of *La Réghaia*, yearly becoming more circumscribed in area; it then returns to its former course and approaches

39 kil. *L'Alma* or *Boudouaou*. Pop. 3505.

This village was the scene of a brilliant action fought on the 25th May 1839, in which 951 French troops repulsed 6000 Arabs. Here also, on the 20th April 1871, the *Franc Tireurs*, under the command of Colonel Fourchault, supported by a few *Mobilisés* and *Zouaves*, drove back the bands of *Kabyles*, who, after the affair of *Palaestro*, sought to invade the plains.

42 kil. *Oued Corso*. The boundary of *Kabylia*.

49 kil. *Belle-Fontaine*. Pop. 1142. A village built by the Government for the reception of families from *Alsace* and *Lorraine*. Before arriving at the village, on the left hand of the route, is the *Koubba* of *Mohammed ed-Dibbah* (the murderer). This individual was made *Kaid* of *Sebaou* in 1737, and *Bey* of *Titeri* in 1745. He was killed during an expedition against *Kabylia* in 1753.

54 kil. *Ménerville*. Pop. 2632. Junction for *Tizi-Ouzou*.

This village was formerly named *Col des Beni-Aïcha*, but its present and official title was given out of compliment to *Monsieur de Ménerville*, Premier President of the *Cour d'Appel* at *Algiers*.

This is a very important position, being the easiest and most frequented entrance into *Kabylia*. It was destroyed by the *Kabyles* in 1871; in consequence their land was confiscated and distributed amongst colonists from *Alsace* and *Lorraine*.

There is some iron ore between it and the sea, and on the coast there is a small harbour, *Mersa ed-Dejaj* (the port of the fowl), now silted up with sand, but at one time a Roman position of some importance; a space of 25 acres is more or less covered with ruins, probably those of *Russubdicarri*. Roman ruins are also found at *Cape Djinet*, farther to the E., between the mouths of the *Isser* and the *Sebaou*.

The line here takes a bend due S., and follows the course of the river *Isser*, the waters of which are abundant even in summer; the country is very fertile, and fig and olive trees are numerous. A fine view is obtained of the *Djurdjura* range.

61 kil. *Souk-el-Haad*. Pop. 3696.

65 kil. *Bent-Amran*. Pop. 130.

A few kil. farther on the line enters the *Gorge of the Isser*, or of *Ben Hinni*. The hills on each side are steep and often precipitous, confining the river within a very narrow bed, so as to form a beautiful landscape. The 72nd kil. is about the narrowest part of the valley, the rocks on each side being not more than 90 metres apart. Numerous cascades falling into the main stream, curious grottoes on the face of the hill, *Kabyle* villages perched on the summit of the mountains, and luxuriant vegetation everywhere, give to this portion of the gorge a peculiarly bright and pleasant appearance. Unfortunately the line goes through so many tunnels that the scenery is not seen to advantage.

77 kil. *Palaestro*. Pop. 3233.

This village, 591 feet above the sea, is situated on a platform bathed on three sides by the river *Isser*. It was peopled by *Tyrolese*, *Italians*, *French*, and *Spaniards*, connected for the most part with the enterprise of opening out the gorge of the *Isser*. When the insurrection of 1871 broke out, it was in a tolerably flourishing condition, considering its size and secluded position. The story of the terrible tragedy then enacted, being, as it was, the most deplorable of the many which then took place, deserves to be recorded.

The village contained about 112 inhabitants; its position was isolated,

surrounded, and commanded on every side by mountains, and on the border of two tribes, one Kabyle, the other Arab, both ripe for revolt. Still no serious fears were entertained till, on 18th April 1871, it was suddenly surrounded by hostile tribes before any means could be adopted for defence. The village being entirely unfortified, it was determined to distribute the inhabitants in the three houses best suited to resist attack,—the priest's house, the barrack of the gendarmerie, and the establishment of the *Ponts et Chaussées*. Captain Auger of the Engineers and the priest directed the defence of the first, the maire commanded the second, and the conductor of *Ponts et Chaussées* the third. In the last, which was the best of the three, the women and children were placed. Soon the attack began, the haystacks and buildings round about were set on fire, and such as could not get into the village in time were murdered.

The assailants now advanced in considerable numbers to attack the curé's house, led by the *Amin-el-Omina* of the *Beni-Khalfour*. The door was soon driven in, but the defenders succeeded in escaping to the gendarmerie with a loss of four of their number. One woman remained behind; she was kept a prisoner for some time and then killed.

At this moment the conductor of the *Ponts et Chaussées* managed to escape to *Fonduk*, where he gave information of what was going on, leaving the house, however, in which he had been stationed, which contained all the women and children, without any one to direct the defence.

On the 22nd the maire, M. Bassetti, Captain Auger, and the brigadier of gendarmerie, entered into negotiations with the insurgents, who offered to conduct them safely to Alma, permitting them to retain their arms. Everything appeared settled, and the colonists in the gendarmerie were on the point of quitting, when one of their number made an offensive movement with his gun. This was the signal for a general massacre, in which only

Captain Auger and the son of the maire were spared at the special intercession of the Amin.

In this horrible carnage forty-one Europeans were killed, and even their corpses were found to have been the object of the most brutal violence; some were thrown alive into the burning houses, and all were stripped of whatever valuables they had.

The house of the *Ponts et Chaussées* was next attacked. Its door, badly made, offered no resistance. The defenders retreated to the upper storey. Fire was applied to the ground-floor, and they were again compelled to retreat higher to the terrace.

It was mid-day in April. In a space of 12 mètres, 45 persons were crowded together behind the parapet of the terrace, 40 centimètres high. If they allowed their bodies to appear they were shot. The heat of the roof, brick vaults supported by iron girders, was intense; even their clothes caught fire. Stones and bricks were thrown upon them from below, which grievously wounded some of their number. A burning sirocco was blowing, and they had not a drop of water to quench their thirst. Several died, and one in a moment of madness committed suicide. The women uttered the most heartrending cries, but it was not till six o'clock in the evening, when the roof was on the point of falling, that these heroic men consented to treat with their assailants.

The Amin agreed to conduct all the men, women, and children to Alma, on condition that they consented to abandon their arms. This was agreed upon. Ladders were brought to permit them to descend. They were then taken to the residence of the Amin-el-Omina, where they found Captain Auger and the young Bassetti. Two days after Colonel Fourchault arrived on the spot with a column from Algiers, to find only corpses and blackened ruins. He had to fight his way there and back to Alma amongst those who had taken part in the massacre.

The prisoners, 40 in number, amongst whom were 32 women and children,

were kept in captivity for 22 days, and only released on the termination of the insurrection, when Mokrani was killed.

The remains of the victims repose under the shadow of the church, and a monument, in the worst style of art, has been erected to commemorate the event.

Now Palaestro has been rebuilt, and considerably enlarged. Thirty families from Alsace and Lorraine have been located here, and additional concessions have been given to the families of the survivors with no sparing hand. A fort has been constructed, and considerable plantations of eucalyptus and other Australian trees have been made.

[There is a bridle path hence, passing through the beautiful scenery of Bou-Zigra to Fonduk, p. 112.]

88 kil. *Thiers* (pop. 163), formerly called *Ain Omm el-Alloug*.

99 kil. *Omar-Dra el-Mizan*. Station for the little village of Omar, distant 2 kil. from the line, and for the much more important one of *Dra el-Mizan* (pop. 1841), 12 kil. to the N.E. An omnibus meets each train, and takes the traveller in 1½ hour and for 1 f. to Dra el-Mizan. This village is situated in a beautifully fertile basin surrounded by the mountain chains of *Djurdjura* and *Maâlikain*. It is built outside the fort which proved so useful during the insurrection of 1871. On that occasion the Kabyles attacked and destroyed the village, but the inhabitants took refuge in the fort, which was strictly blockaded by the enemy from the 22nd April until relieved by General Ceres on the 4th June. A market is held here every Thursday.

[Instead of returning by the same route, the traveller may do so by *Les Issers* (see p. 153), and there is a horse road to Fort National.]

Due east of Dra el-Mizan, on the road to Fort National, is *Bordj Boghni* (pop. 164), so called from an old

Turkish fort, the most advanced which this people occupied in Kabylia. Near the bridge at the entrance to the village is a pyramidal monument to the memory of 148 men massacred by the Kabyles here in 1866. A great market is held every Sunday, which was the principal focus of sedition in the insurrection of 1871. This place is connected with Dellys by a steam tramway.

123 kil. **Bordj Bouira** (the fort of the small well). Pop. 1198.

It derives its name from an old Turkish fort in the neighbourhood. It is now a flourishing village.

This is one of the few districts in the province of Algiers where lions are still occasionally to be found.

It is a convenient place at which to pass the night when going to Tunis, as the traveller can thus start by a later train.

[There is a diligence service to Aumale.]

After leaving Bouira the line follows an easterly direction between the *Oued Eddous* and the *O. Zaiam*, through a very fertile plateau, to

137 kil. *El-Esnam*, or *Ain el-Esnam* (the spring of images or statues), from which place also there is a carriage road to Aumale.

3 kil. to the S.W. are the ruins of a Roman barrage in the *Oued Benian* (valley of building), an affluent of the *Oued Berdi*, which itself falls into the *Oued Zaiam*. A little beyond the caravanserai, on the right of the road, are two remarkable conical hills called *El-Messen* (les deux Mamelles), which form a landmark for miles around. After this the country becomes poor, and would be uninteresting but for the magnificent view of *Djurdjura*, with its snow-clad peaks, which the traveller enjoys during the whole of the day's journey.

150 kil. *El-Adjiba* (the wonderful). A few kil. S.W. of *El-Adjiba* are some curious caverns at *Ahl Ksar*, said to have been a Roman mine, and farther on is the village of *Sebkha*, where there is a salt spring, utilised

by the natives for the manufacture of salt. The water is received into open basins, and evaporated by solar heat.

162 kil. *Maillot*. Pop. 248. At the *Col des Pins* the carriage road to Bougie turns off to N.E., and crosses the *Oued es-Sahel* by an iron bridge. 4 kil. from this spot, on the opposite side of the valley, is the village of *Maillot*, built in 1883. It is situated on the lowest spurs of the Djurdjura range, in a very healthy and picturesque situation, amongst groves of olive trees. There is a little inn.

169 kil. **Beni-Mansour**. Junction for Bougie (see Rte. 1). At 7 kil. beyond the station is the old *Bordj Beni-Mansour*, 923 feet above the sea, a small fort built to dominate the head of the *Oued es-Sahel*. This was besieged by the Kabyles in 1871 for forty-one days. They even brought against it a curious old piece of ordnance, which probably formed part of the artillery of the Duc de Beaufort, abandoned during his disastrous expedition to Djidjelly in 1664. It bore the inscription—

ANNO DEI 1635
DEOS ME AIUVET.

(Deus me adjuvet.)

The view from the terrace of the *Bordj* is magnificent. The whole of the N. horizon is bounded by the Djurdjura range, only a few miles distant; its highest peak, *Tamgout Lalla Khadidja*, being nearly opposite the fort. Its summit is covered with snow for nine months in the year, and near the top is the shrine of the *Lady Khadidja*, a pilgrimage to which is considered by the Kabyles as a hardly less meritorious action than one to Mecca. At the foot of it runs the gigantic bed of the *Oued es-Sahel*, in which only a few threads of water are visible, the remainder being taken up by groves of olive trees of great antiquity. It is said that some of these were actually grafted in the time of the Romans; that the art of grafting them had been lost amongst the Kabyles, and only reintroduced after the French conquest.

South of this, and parallel to the

right bank of the river, is another lower range of hills, on the tops of which are perched the villages of the *Beni-Mansour*, *Oulad bou Ali*, *Iril*, *Tirille*, and *Taurirte*. To the east the horizon is shut in by the hills bounding the *Oued es-Sahel*, between which, at no great distance, is the *mamelon of Akbou*, the country of *Bin Ali Cherif*. One can even observe a small eminence on the base, which is the curious Roman mausoleum near the village of *Akbou* (see p. 257). The valley running up from this *mamelon* towards Djurdjura is the boundary between Constantine and Algiers.

At the foot of the mound on which the *Bordj Beni-Mansour* is built is a small Christian cemetery, the last resting-place of Lieutenant the Baron *Aucapitaine*, who has rendered such important services to archæology in Algeria. He and his bride of two months died within three days of each other of cholera in 1867.

The line now traverses an undulating plateau covered with Aleppo pine, juniper, and brushwood.

186 kil. *Les Portes de Fer*. This is the nearest station for the *Bibana*, or *Portes de Fer*, 3 kil. distant, which are well worth careful examination.

The above names have been given to two remarkable passes by which alone access is obtained to the highlands of *Mansoura* beyond, 1104 feet above the level of the sea. The mountains here are of the greatest possible interest, from a geological point of view. They consist of strata of black rock, sometimes hard and compact, like trap; at others, soft and friable, like schist, alternating with a softer substance, generally indurated clay. On the upper and outer surfaces of these ridges the softer material has been washed away, leaving the harder strata remaining, like Cyclopean walls, which often assume the most fantastic forms. Sometimes they are in considerable numbers, and parallel to each other, like the side-scenes of a theatre; sometimes they fringe the crests of the mountains like delicate fretwork, and at others they assume the form of

grotesque animals; chameleons standing out in bold relief against the sky, or gigantic pythons winding their sinuous forms along the sides of the mountains.

The Grande Porte is that through which the railway passes, following the course of the river, here called *Oued el-Hammam*. Lower down it takes the name of *Oued Shebba*, and after its junction with the river flowing through the *Petite Porte* it is known as the *Oued Maregh*. The peculiar stratification of the hills on each side is here seen to admirable advantage.

The rivers in this district are so highly charged with magnesia as to be quite unpotable; the only good drinking water for miles round is obtained from a small spring in the bed of the river at the entrance to the pass.

Beyond, on an eminence to the right of the road, and on the left bank of the river, are some very curious hot sulphurous springs, called *El-Hammam* (the bath). The ground covered by their deposit is about half a mile long; the springs bubble up in small circular basins, exactly like miniature Geysers, with a raised margin and a deposit of sulphate of soda covered with a layer of pure sulphur. The water in the largest one is carefully conducted into a rude bath which is much in repute amongst the natives. There is also a pool of still hot water, like those in the neighbourhood of the Geysers; the temperature of the water is sufficient to boil an egg in a few minutes; it varies from 172° to 200° Fahr., and the water contains 22 centigrammes of sulphate of sodium per litre.

To visit the smaller pass, called *La Petite Porte*, it is necessary to leave the high road about 2 kil. before the entrance to the larger one, at a bridge crossing an affluent of the main stream called the *Oued bou Kotan*. This is the pass followed by the column of 3000 men under command of Marshal Valée and the Duc d'Orléans in 1839—the first French troops to pass this formidable barrier.

The road, if such it may be called,

passes along the bed of the above-named stream, which is also saline, and is enclosed between stupendous rocks, in some places not more than 12 feet apart, presenting the same stratified appearance as in the larger gate. Presently the path ascends the left bank of the stream, and, making a detour to the right, joins the main road just beyond the hot springs.

The country beyond is mountainous and sterile, only here and there a few patches of cultivation, until—

201 kil. *Mzita*.

210 kil. *Mansoura*, a small Kabyle town in the kaidat of Mzita, 2637 feet above the level of the sea. Many wild violets grow in the neighbourhood and are brought by Kabyle boys as the train passes.

[A very interesting excursion may be made from Mansoura to Boni and Gelâa (see Rte. 18). There is a fairly good bridle path, and the distance to Boni is not more than eight hours by mule; it would be quite feasible to proceed thence to Kharata in the Chabet el-Akhira in two days (Rte. 12), spending the night at *Beni-Ourtilan*.]

226 kil. *El-Achir*.

239 kil. *Bordj bou-Arredj*. Pop. 2275. 3063 feet above the sea level.

When the Duc d'Orléans, with the army commanded by Marshal Valée, penetrated into the Medjana to effect the passage of the Portes de Fer, the camp was pitched at the *Ain bou-Arredj*, near which rose abruptly from the plain a steep and almost conical hill, crowned with the ruins of a fort built by the Turks in the end of the 16th century, out of older Roman remains. This fort had been twice burnt by the *Mokranis* in revolt against the Turks, and had subsequently been abandoned by the latter; it now served as a watch-tower where robbers, embracing as they could the whole plain at a single glance, were constantly lying in wait for travellers and caravans.

After the occupation of Setif it became necessary to station a force there

permanently, in order to support Mokrani in his endeavours to establish French influence and to oppose that of Abd-el-Kader, whose lieutenant had inspired such dread amongst the population of the Medjana that they had entirely deserted the plain and retreated to the mountain.

The *Bordj* was rebuilt, and under the protection of its ruler, the Medjana became rapidly peopled, and the soil, which had lain fallow for years, was brought under cultivation.

In 1871, when the insurrection broke out, Bordj contained 90 houses in the town and 30 in the vicinity of it, with a population of 300, owning 15,000 acres of arable land. For the third time the town was destroyed (*ante*, p. 60) by the Mokrani tribe.

The town has been rebuilt on a much larger scale, and its territory has been augmented by the sequestration of the insurgents' property. A monument, in the form of a marble obelisk, has been erected in the village to commemorate the heroic defence of the place, the honour of which was principally due to the *mobiles* from Aix and Marseilles; on it are inscribed the names of those who fell.

The ancient Bordj, which was destroyed with the rest of the town, has been rebuilt, and the whole place has been surrounded by a strong bastioned wall of defence. The old fort, which now constitutes the citadel, is situated at the N.E. angle; this it was which successfully resisted all the efforts of the rebels to take it in 1871.

The whole of the magnificent and fertile plain of the Medjana became the property of the State by the defection of Mokrani; thus one of the finest portions of the country has been opened out to colonisation.

[For a route from this place to Fort National by the Oued es-Sahel, see Rte. 20.]

246 kil. *El-Anasser*. After passing this place the line takes a bend, and runs considerably S. of the old high road; which it does not again rejoin till the junction of both at Setif.

254 kil. *Chénia*.

263 kil. *At-Tassera*.

271 kil. *Tixer* (view line of snow-capped mountains).

283 kil. *El-Hammam*.

296 kil. *Mesloug*.

308 kil. **Setif**. Pop. 6335. 3573 feet above sea level.

Setif, the ancient *Sitifis Colonia* of the Romans, was one of the most important cities that that nation possessed in Africa, and was made the capital of the province of *Mauretania Sitifensis*. In 419 it was injured by an earthquake, and later on ravaged by the Vandals and the Arabs; but even at the time of the French occupation traces of the ancient fortifications were distinctly visible. In the Middle Ages, El-Bekri, an Arabian historian, wrote that, although the walls had been destroyed, the city was still flourishing and well populated, and contained numbers of bazaars.

In 1839 it was taken by the French under General Galbois.

On the S. face of the citadel at this period was a single venerable aspen tree, the only one visible as far as the eye could reach; below this was a spring, the water of which flowed down and irrigated a valley leading into the *Oued bou-Sellam*. These waters have now been carefully utilised for the supply of the town and the gardens round it.

The town of Setif, as it exists at present, is entirely modern; and although traces of the ancient walls and ramparts are still visible, most of the Roman ruins which remained at the time of the French occupation have disappeared. The wide streets are lined with substantial modern houses, and many of them are bordered with trees. The shops are numerous and well supplied. The town is entered by the *Gates of Bougie, Constantine, Alger, and Biskra*, the first-named of which is in the military quarter.

The *Modern Citadel* forms a military quarter to the N. of the rest of the town; it contains the general's residence, barracks for 3000 men, an hospital that can make up 1000 beds,

besides officers' quarters, storehouses, and all other requisite military buildings. It was almost entirely constructed by the men of the garrison stationed here, and was finished in 1847.

The walls of the ancient Roman city, restored probably by the Byzantines, have been incorporated in the modern French ones; they are of great solidity, and flanked by ten towers.

On the *Promenade d'Orléans*, a dreary, ill-kept enclosure outside the *Porte d'Alger*, a collection has been made of Roman antiquities, such as columns, capitals, tombstones, fragments of sculpture and inscriptions, some of which make mention of the ancient *Sitifis*. Two of the most interesting inscriptions found here are the epitaphs of the Bishop Novatus, mentioned in the acts of the Council of Carthage and by St. Augustine, and of the martyr, St. Laurentius.

Here also has been erected a column, surmounted by a bust of the Duc d'Orléans, in commemoration of his expedition to the *Portes de Fer*.

In the house of the Commandant de Génie is a fine *tesselated pavement*, representing a head of Neptune surrounded by Nereides mounted on seahorses, dolphins, etc., which was discovered at Kasr Temouchent, where it formed the principal ornament of the fountain there. A few good pieces of sculpture have also been built into the walls of his garden.

Setif being so high above the level of the sea, its climate greatly resembles and is quite as healthy as that of the centre of France, although considerably hotter in summer. It is suited to the growth of all kinds of European fruits, and in the plain in which it is situated cereals grow in great abundance. Its geographical position is important, as it is the junction of several great lines of communication, such as those with Algiers, Constantine, Bou-Saâda, the Medjana, the Hodna, and Bougie.

Its market, held outside the city gates, is the rendezvous where the Kabyle from the mountains, the Arabs from the plains, and even the Saharans

meet to exchange their produce. Every Sunday during the months of August, September, and October it is attended by not less than 8000 or 10,000 natives. The Bou Taleb tribe, about a day's journey distant, are celebrated for the manufacture of carpets and haiks.

By a decree of the 26th April 1853 a concession of 50,000 acres was made to the Compagnie Gènevoise for the purpose of hastening European colonisation in this district. This company created several villages, amongst others Ain-Arnat, El-Ouricia, Bouhira, Mahouan, Messaoud, and El-Hamelia; but the object of the concession has not been attained, and a great part of the land has been simply let to the Arabs.

The country may be divided into two regions, very distinct from each other—the mountainous part, inhabited by Kabyles, similar to other parts of Kabylia elsewhere described, and the regions occupied by Arabs.

The latter are immense plains, the average height of which is about 8000 feet above the sea, which stretch from the Medjana to Tebessa, possessing abundant pasturage, rich in cattle and grain, carpeted with the most beautiful flowers in spring, cold and bleak in winter, hot, parched, and dusty in summer; without a tree as far as the eye can range, save in the vicinity of modern French villages.

They are occupied almost entirely by two tribes, the *Oulad Abd-en-Nour* and the *Eulma*, and may be divided into two very distinct zones, the *Tell* and the *Sebakh*. The former is the most fertile, and abounds with ruins of Roman agricultural and other establishments, and numerous basilica; the latter has a salter and more arid soil, and its climate is hotter and more feverish. Before the French occupation these tribes were entirely nomad, but since then they have become much more stationary, and Arab villages have sprung up in every direction, where a spring or a well renders it possible.

From Setif the beautiful road through

the **Chabet-el-Akhira** descends to Bougie (see Rte. 12).

At 9 kil. E. of Setif, on the high road, is *Kasr Temouchent*, or *La Fontaine Romaine*, where was found the tessellated pavement now in the house of the Commandant de Génie.

322 kil. *Ras el-Ma*. To the S. of the line may be seen an isolated mamelon, *Djebel Sidi Brao*, where a number of Christians are said to have been massacred during the Mohammedan invasion on refusing to embrace the religion of El-Islam.

339 kil. **ST. ARNAUD.**

352 kil. *Bir el-Arch.*

367 kil. *St. Donat*. 5 or 6 kil. to the N.W., and beyond the high road, may be seen the tomb of *Sidi Yahia*, the founder of the tribe of *Oulad Abd-en-Nour*. M. Féraud translates the inscription on it—

"O toi qui es arrêté devant notre tombe
Ne t'étonnes pas de notre état :
Hier nous étions comme toi ;
Demain tu seras comme nous."

This brings to our recollection the inscription not uncommon in old country churchyards in England, which, with occasional variations, runs—

"Travellers, as you pass by,
View the ground wherein we lie :
As you are now, so once were we ;
As we are now, so shall you be."

384 kil. *Mehta el-Arbi*.

403 kil. *Telergma*. At 8 or 9 kil. distance to the N.W., on the high road, and 40 kil. from Constantine, is the pleasantly situated village of **Oued Atmenia**. It was created in 1864.

At 2 kil. from the village, in the property of the Comte de Tourdonnet, there was discovered in 1878, at a depth of from 5 to 7 feet below the surface, the remains of an extensive range of buildings, the mosaic flooring of which was in so perfect a condition that an architect, M. Martin, was able to make drawings of it ; this was published by the Archaeological Society of Constantine, and justly rewarded with a gold medal at the Paris Exhibition of 1878. The proprietor of this establishment

was Pompeianus, proconsul of Africa, in the reign of Honorius, described in an inscription found at *Calamo* as *Viro clarissimo amplissimoque*.

The mosaics in the baths were by far the finest and most interesting that have yet been found in Algeria. They consisted of numerous tableaux, —one representing the owner's house, with park behind. There are hunting scenes in which every huntsman and dog is named ; views of the stables, each horse having its name attached ; garden scenes in which the lady of the house is spinning under a palm tree ; and numerous other objects not only of great interest, but which give us an idea of the style of domestic architecture in use in Africa in the first and second centuries, the probable date of the building.

In the stable are the following names of horses :—

ALTVS VNVS ES	PVLLENTIANVS
VT MONS EXVLTIAS	DELICATVS
VINCAS NON VINCAS	TITAS
TE AMAMVS POLIDOXE	SCHOLASTICVS

Another mosaic gives the names of the huntsmen : **CRESCONIVS**, **CESONIVS**, **NEANTVS**, **POMPEIANVS**. The attendants are named, **DIAS** and **LIBER** ; and the dogs, **FIDELIS** and **CASTVS**.

At 1 kil. beyond the village is the thermal spring of *Hammam Grous* and the ruins of the *Zaouia* of *Sidi Hamana*, who, according to Arab tradition, caused the hot springs to appear in order to facilitate the winter ablutions of his followers.

427 kil. **El-Guerrah**. Junc. for *Batna* and *Biskra*, where the traveller may conveniently pass the night.

The line now takes a turn to the north.

436 kil. **Oulad Rahmoun**. Junc. for *Ain-Beida*. In the neighbourhood are many interesting megalithic remains (see p. 247).

In the spring of *Bou Merzoug* is found a very remarkable fish, the *Tellia apoda*, a cyprinodon destitute of ventral fins ; it has no other known habitat, and never strays more than half a mile from the source.

448 kil. **Le Kroub** (junc. for Bône and Tunis), more correctly *El-Khroub* (the ruined), from the tradition that an important town once existed here. There is a market, held every Friday afternoon and Saturday morning. About 3 kil. to the E. is the beautiful monument called **Es-Soumah**, erroneously styled by the people of the locality *The Tomb of Constantine* (see p. 208).

453 kil. *Oued Hamimim*.

460 kil. *Hippodrome*.

464 kil. **Constantine**. See p. 196.

ROUTE 9.

Algiers to Aumale and Bou Saâda.

Service of diligences as far as Aumale.

25 kil. *Sidi Moussa*.

Hence the road branches off in a S.E. direction, following the right bank of the *Oued Djemâa*, which is in winter a veritable torrent, causing much injury to the farms on its banks. Several proposals have been made to embank it, but the expense has hitherto prevented anything being done.

30 kil. *El-Arba*. Pop. 3802.

A village situated at the foot of the Atlas mountains, founded in 1849. It owes its name to the Arab market held here on Wednesday. Oranges are grown here in great abundance, and of excellent quality, the land is rich both in cereals and tobacco, the culture of which is assured by irrigation from the *Oued Djemâa*. 2 kil. S. of it is the ex-Imperial farm of *Hououch Bou-Kandoura*, directed till after the fall of the empire by Mr. Hardy, the creator of the *Jardin d'Essai* at Algiers. The road now ascends to

43 kil. *Melab-el-Koran*, an auberge situated at about 1639 feet above the sea. The road between Arba and Sakamodi is very picturesque, and worthy of a visit; beyond it is very dreary.

52 kil. *Sakamodi*. The highest point on the road to Aumale, 3282 feet above the sea. In one of the ravines here a detachment of soldiers of the military train was overtaken by snow in 1848 and perished. It has only a small auberge and a few colonists.

60 kil. *Ain-Barid* (cool fountain). The route now descends rapidly to

71 kil. *Tablat*, the ancient *Tablata*, where the diligence stops for breakfast; a poor hamlet, where, notwithstanding the excellence of the climate, colonisation has hardly yet taken root. A large bordj has been built here.

75 kil. The road passes the confluence of the *Oued Melah* and the *Isser*. There is a large caravanserai called *Mesoubia*, where it is possible to put up.

100 kil. *Les Frênes*, or *El Bethom*, the Arabic name for the *Pistachia Atlantica*, which somewhat resembles the ash; an insignificant hamlet.

108 kil. *Bir Rebalou*. A small village created in 1858 in a rich and fertile district.

116 kil. *Les Trembles*. A poor, neglected little village, though situated in a rich and healthy country.

[At 7 kil. from Les Trembles and 21 from Aumale, on the road to Bouira, is the village of *Ain-Bessem*, of recent construction. Near the village are the ruins of an important Roman fortress, *Castellum Auziense*, but the walls have been almost entirely destroyed to build the colonists' houses. The spring, which gives its name to the place, is almost in the centre of it.]

128 kil. **Aumale**. Pop. 5647.

The ancient *Auzia*, known to the Arabs as *Sour Ghoulan* (Rampart of Gazelles), 2790 feet above the sea. *Auzia* was founded during the reign of Augustus, a few years before the Christian era, and the epoch of its greatest splendour was the end of the 2nd century, shortly after which it disappeared from history. It played a considerable part in the struggle of Tacfarinas against the Proconsuls, and again, at the end of the empire, in the wars of Theodosius against the revolted

Mauretians. The Turks built a fort here, out of the ruins of the Roman city, but when the first French expedition visited it in 1843 nothing but a heap of ruins remained of either occupation.

It was not till 1846 that the Government of Algeria determined to build a permanent military post at *Sour Ghozlan*, which received the name of Aumale.

The modern town, which consists of little more than a solitary street, is surrounded by a crenelated wall with four gates, those of Algiers, Bou-Saâda, Setif, and Médéa.

Several interesting excursions may be made in the neighbourhood, especially on the Roman road between it and Boghar. At 12 kil. W. of Aumale is a small monument called *Kasr bint-es-Sultan*, palace of the Sultan's daughter. Beyond is the *Ghorfa des Oulad Miriam*, an old Roman tower, and at 26 kil. from Aumale, *Sour Djouab* the *Rapidi* of the Itinerary of Antoninus, and perhaps the *Lamida* of Ptolemy, the *enceinte* of which is still visible. ☉

Another excursion may be made to the thermal springs of *Hammam Ksanna*, situated about 33 kil. in an easterly direction. The road to them crosses the Oued Achebour, which, after its junction with the Oued Merdja, becomes the Oued Akkal; it then passes between two tumuli, which, to judge by the stones lying about, probably conceal Roman ruins; then turning somewhat to the N., and leaving the route to Bou-Saâda to the right, it follows that leading to Bordj Bou-Arredj.

The small garrison of Aumale made a very gallant sortie during the insurrection of 1871, and drove off a greatly superior force of the enemy under the personal command of Bou Mezrag, who left 300 of his followers dead on the field.

The journey on to Bou-Saâda is not one that can be recommended to the general traveller, unless he is disposed to submit to a good deal of roughness and discomfort for the purpose of seeing a Saharan mud town, with

quaint streets, on a picturesque water-course, amid date groves. It can be done by diligence or mail-cart in about twenty-four hours, including a night's rest on the road. The cold is sometimes very great in winter.

After leaving Aumale there are fine views of the Atlas on the distant right. The route descends continually, and reaches the plain after three hours' drive.

35 kil. *Caravanserai* of *Sidi Aissa*. Thence over a perfectly flat plain to

60 kil. *Ain-Adgel*. There is rough but decent accommodation at this caravanserai. The next stage is over a plain diversified by occasional hills to

102 kil. *Ain-Kerman*, a solitary caravanserai; a little bit of vegetation beneath it is about the only green spot on the route. In the distance, on the left, the salt mountain of El-Outaïa may be seen. Above the caravanserai are the ruins of a fortified position, of a square form, containing apartments which seem to have served as habitations; it is built of square dressed stones, and is evidently of the same epoch as the tombs of Bou-Saâda. The country beyond is yellow and stony, and farther on there are immense dunes of sand skirting the bed of the Oued Bou-Saâda the whole way to the town.

132 kil. **Bou-Saâda**. Pop. 5453. No good accommodation is obtainable, but there are several cabarets kept by Maltese. The altitude is 578 mètres above the sea.

The oasis of Bou-Saâda is situated on the southern limit of the Hodna, and on the northern one of the *Oulad Nail*. The town is surrounded on the S., E., and N. by gardens containing about 8000 palm and abundance of other fruit trees. It contains about 1000 houses built of sun-dried bricks, disposed in quaint, narrow, and tortuous streets. It is divided into distinct quarters, which were frequently, before the French conquest, at war with each other. It has a large population of Jews, devoted entirely to commerce and to the manufacture of gold and silver ornaments.

Bou-Saâda is celebrated for its manu-

facture of woollen goods, such as carpets, burnouses, haiks, etc. These are usually made by the women, and command a high price in the Tell.

The Roman occupation of this district appears to have been purely military. Nevertheless, at the Oued Chellal, there are remains of barracks, which prove that agricultural establishments existed at that place, though by no means to such an extent as in the eastern part of the Hodna.

At *Aïn-el-Ghorab*, 35 kil. to the S., there is a fine summer climate, with abundance of good water. *Aïn-Melah* is 10 kil. still farther S.; there may be seen many salt and fresh springs in close contiguity, which mingle their waters as they flow out of the place.

There are great numbers of megalithic remains in the country round. In the region of the *Madid*, to the N. of the Hodna, is an immense necropolis of the stone age. The mountains near *Bou-Saâda* abound in similar tombs.

[From *Bou-Saâda* there is a carriage road to *Djelfa*, 120 kil., but not very good; the first halt is at 60 kil., at an Arab village, where there is a caravan-serai; also one to *Bordj Bou-Arredj* by *M'sila*; and a third to *Biskra* by *M'doukal* and *El-Outaïa*—the last takes 3 days on horseback, or 4 to 5 with a caravan.]

ROUTE 10.
Algiers to Oran by Railway.

Distance in Kil. from Algiers.	Names of Stations.	Distance in Kil. from Oran.
..	ALGIERS	421
2	Agha	426
6	Hussein Dey	415
11	Maison Carrée (junction)	411
15	Gué de Constantine	406
20	Baba Ali (Arrêt)	401
26	Bir-Touta	396
37	Boufarik	384
45	Beni-Méred	377
51	BLIDAH	371
53	La Chiffa	363
63	Mouzaïville	359
69	EL-AFFROUN (junction)	353
73	Oued-Djer	344
91	Bou Medfa	331
98	Vesoul Benian	323
110	Adelia	312
120	APFREVILLE	302
124	Lavarande	297
146	Duperré	276
160	Oued Rouina	261
170	St. Cyprien des Attafs	351
173	Les Attafs	249
183	Temouïga (Arrêt)	239
186	Oued Fodda	235
195	Le Barrage (Arrêt)	227
203	Pontéba	218
209	ORLÉANSVILLE	213
224	Oued-Sly	198
232	Charron	189
243	Le Merdja	179
254	Oued Riou	168
263	Djidiouia	159
283	Les Salines (Arrêt)	133
296	RELIZANE	126
315	L'Hillil	107
332	Oued Malah	90
346	Perrégaux (junction)	76
360	L'Habra (Arrêt)	62
370	St. DENIS DU SIG	52
376	L'Ougasse (Arrêt)	46
381	Mare d'eau (Arrêt)	40
395	Ste. Barbe de Tlélat (junc.)	26
404	Arbal (Arrêt)	18
411	Valmy	10
416	La Senia (junction)	6
421	ORAN (Karguentah) . . . . .	..

The train starts from the station on the quay, and passing the Agha, follows the edge of the shore as far as

6 kil. *Hussein Dey*, so called from a fine building which belonged to the last Dey of Algiers. It is now incorporated in the large establishment for the purchase and sale of tobacco, on

account of Government. The country round is richly cultivated as market gardens.

A little farther the line turns inland, and reaches

11 kil. *La Maison Carrée.*

Junction of line to Constantine.

Here the line, which has hitherto gone in an easterly direction, makes an abrupt turn to the S. W., and passing between the Harrach on the left and the foot of the Sahel on the right, enters the Metidja, a vast fertile plain, 100 kil. long and 25 broad, contained between the first slopes of the Atlas and the high land of the Sahel. The population of this plain is steadily increasing, and it now contains 25,000 Europeans, principally engaged in agriculture.

15 kil. *Gué de Constantine.*

20 kil. *Baba Ali.*

26 kil. *Bir-Touta.* Pop. 2002.

37 kil. **Boufarik.** Pop. 8049.

Boufarik, at the time of the French invasion, was a pestilential marsh, tenanted chiefly by wild beasts. In 1832 it was occupied by General d'Erlon, who established an intrenched camp there; but for many years the malaria killed off the settlers almost as fast as they came, and the camp before mentioned acquired the name of *Le Cimetière.*

Even as late as 1863, an English writer, whose observations are always accurate, thus speaks of it: "Not a single French settlement in all Algeria bears such a death-fraught name; nowhere throughout the land has civilisation gained a victory at such an enormous cost. Wasting ague or malignant fevers cut off both old and young. Under the hot autumnal sun the exhalations from a swampy soil become a virulent poison, which the strongest cannot withstand."

At the present time, however, Boufarik is a healthy, flourishing country town, with large, clean, densely-shaded streets and squares, through many of which flow streams of clear water.

The most important market in the colony is held here every Monday for the sale of cattle and agricultural produce; it is well worthy of a visit.

A bronze statue of Blandan (see below) has been erected here by public subscription.

A few kil. to the S. in the mountains is the iron-mine of Soumah, where the ore, an oxide of iron, is excavated in galleries, and not à ciel ouvert, as is usually the case in Algeria. This mine belongs to the same company as that of Ain-Mokra, near Bône, and Beni Saf, on the coast between Oran and Nemours. It is not worked at present.

45 kil. *Beni-Méred.* Pop. 552.

This village had in 1839 a redoubt and blockhouse, where a small detachment of cavalry was stationed for the protection of the roads. In 1841 a village was created by the military engineers, destined to receive a body of military colonists, a part of whose duty was to guard the great barrier, or intrenchment, intended to restrain the incursion of the Arabs in the direction of Algiers. In 1845 the village was increased and peopled by civilians. In the public place is a fountain, surmounted by an obelisk, erected in memory of Sergeant Blandan and 20 French soldiers, who were attacked in April 1842 by about 300 mounted Arabs. They maintained their defence in the most heroic manner until succour arrived, but only five of them survived. Blandan himself was amongst the slain.

51 kil. **Blidah.** Pop. 12,711.

The word *Blidah* is a corruption of *Boleida*, the Arabic diminutive of *Belad*, a city.

Under the Romans Blidah was a military station, and it was occupied as such by the Turks. It was entirely destroyed by an earthquake in 1825, but was very soon rebuilt on the same site. During the first year of the French occupation the inhabitants of Blidah frequently resisted the French army. On the 26th of July 1830 they attacked the expeditionary column under General de Bourmont; they had a severe engagement with Marshal Clauzel on the 19th of November following; they subsequently joined the coalition organised by the lieutenants of Abd-cl-Kader, and were

severely punished by the Duc de Rovigo in 1832, and by the Comte de Damrémont in 1837.

The treaty of the Tafna put an end to these wars. Blidah was ceded to France, and Marshal Valée took possession of it on the 3rd of May 1838.

The growth of fruit trees, especially the orange tribe, is increasing in a remarkable manner, and large quantities of oranges are sold in the market of Algiers and exported to France.

The situation of Blidah is exceedingly beautiful, at the foot of the first slopes of the Atlas Mountains, whose summits overshadow the town; while on the other side the Metidja plain stretches as far as the Sahel hills and the coast.

It is a pleasant residence for a few days, especially about April, when the trees begin to put forth their leaves, and the air for miles round is perfumed with the scent of the orange blossoms. The water supply is so abundant, and has been regulated with such care, that the environs are a succession of gardens, the roads are well shaded with trees, and there are charming promenades in every direction. The climate is distinctly colder than Algiers in winter, cooler perhaps in spring, but much warmer than the heights of Mustapha in summer. It is a good centre from which to make expeditions, as the hours of departure of the trains are later and more convenient than at Algiers.

The *Place d'Armes* is the principal square in the town. This Place is surrounded by arcaded houses, and planted with trees. The gates are called—the Portes d'Alger, du Camp des Chasseurs, de Bizot, Bab Zaouia, Bab er-Rabah, and Bab es-Sebt. The military buildings are on an extensive scale, the *Barracks* accommodating 3000 men, and there are also large cavalry quarters.

The *Cavalry Barracks and Stud* should be visited for the sake of seeing the stallions, which are frequently of the best Arab races. There is stabling for 300 horses.

The most interesting promenades in [Algeria]

the vicinity are—the various orange gardens, the *Jardin Bizot*, outside the gate of that name, the *Bois sacré*, a group of magnificent olive trees in the public gardens to the W. of the city, and, at a distance of about 2 m. beyond the walls, in the ravine of the *Oued el-Kebir*, at the head of which are the *Koubbas* of *Sidi Ahmed el-Kebir* (who died in 1580), and his two sons. These are like most of the other *koubbas* of the Arab marabouts, but are well worth visiting, on account of the picturesque beauty of the ravine in which they are situated.

Interesting fêtes take place annually here on the Prophet's birthday (*Moulid en-Nebi*), the 12th and 13th of *Rabia el-Owel*.

A few yards beyond the cemetery is the *Fontaine fraîche* on the left bank, a perennial source of pure water, which, rising from the mountain-side, beneath a huge rock on which a vast karoub is growing, is carried in an underground aqueduct to Blidah; it passes twice beneath the bed of the river. The fountain is covered by an ugly brick building erected in 1866. Above this spot the valley divides; the branch to the right has a good road practicable for horses or mules, and is extremely picturesque, well wooded, and cultivated. After about a mile it widens, and in the space thus afforded is the village of *Beni Salah*, half hidden by luxuriant plantations of orange and fig. The path continues through most picturesque scenery up to the very cedars of *Beni Salah*, and is well worthy of being explored.

Another interesting excursion is the ascent of the mountain of *Beni Salah*, 5379 feet high, due south of Blidah, which can easily be done on mules in one day. Each mule costs 5 f., and a guide 3 f.

The farm called *La Glacière* is reached in two hours; it belongs to M. Laval, proprietor of the café on the S. side of the *Place d'Armes* at Blidah, who is always most courteous to travellers, and will permit them to pass the night in his house should they desire to do so. He is busied in

reclaiming his concession, and has some thriving plantations of conifers and chestnuts, also sheep and cattle. But his chief occupation is the collection of snow in his *glacière* for use in summer.

From this point a walk of 45 min. brings one to the summit, where two solitary cedars form a conspicuous landmark from Blidah; the largest measures $7\frac{1}{2}$ feet in girth.

Hence the traveller should walk along the ridge to the westward in order to enjoy the view from the various summits, and the beautiful lawns and gullies, studded with wild flowers, which divide one group from another. The view from the highest peak, about $\frac{3}{4}$ m. from where the ridge is first gained, is singularly beautiful; at this point the Atlas bends towards the S., affording a view of its S. flanks, wooded with cedars, and often confused, barren ridges, that are piled one above the other as far as the eye can see, with Djurdjura in the distance. To the N., the spurs and valleys that descend into the plain of the Metidja, with towns and villages, and again bounded by the Sahel; to the W., Chennoua, the Tombeau de la Chrétienne, Koléa, different points in the Sahel range; and in the extreme W. there is in clear weather a fine view of Ouarsenis.

It is quite easy walking along the highest part of the ridge so far, as it preserves a uniform breadth of about 100 mètres, and is generally carpeted with turf.

Pursuing the walk, in less than three hrs. the traveller arrives at the *Koubba* of *Sidi Abd-el-Kader El-Djilani*, a walk of exceeding beauty. This is one of the numerous *koubbas* erected in honour of the founder of the most ancient and popular religious confraternity in the country. *Sidi Abd-el-Kader* was a native of Djilan, in Persia, and died at Baghdad about A.D. 1165. He was the patron of the poor and afflicted, who solicit without ceasing alms in his name. The superior (*khalifa*) of the sect resides at Baghdad, and has *Mokhaddems*, or *shetkhs*, all over North Africa, as local

representatives of the order. The celebrated namesake of this saint, the Amir Abd-el-Kader, made a pilgrimage to his tomb, with his father, Mahi-ed-Din, when about nineteen years of age.

The cedars are not to be compared with those of *Teniet*; they are much smaller, but they have the form and character of the larger ones, and few will be found not to admire the forest after walking through it for half an hour.

From the *Koubba* the descent lies by some old *glacières* and a spring of pure water, and the tourist who went eastwards on leaving Blidah will return to it from the west, having passed entirely round the head waters of the *Oued-el-Kebir*.

Another excursion may be made to the Gorge of the Chiffa and the Ruisseau des Singes (see p. 158).

56 kil. The line crosses the Chiffa by an iron bridge.

58 kil. La Chiffa.

63 kil. *Mouzaïville*. Pop. 3756. This village was completely destroyed by the earthquake of January 1867, by which the adjoining village of La Chiffa was also thrown down. Of seventy-five houses not one remained entire, and forty lives were lost.

7 kil. to the S., under the Pic de Mouzaia, is the stud farm of Mr. Smith, an American gentleman well known in the racing world.

About 500 mètres S.E. of the village, at a place called El-Hadjeb, were the remains of the Roman post *Tanaramusa Castra*, where were found, amongst other things, a statue of Bacchus, and a tumulary inscription of Bishop Donatus, killed in the war with the Mauretians, and buried here in A.D. 493.

69 kil. *El-Affroun* (pop. 998), an agricultural colony, was established in 1848. This also suffered cruelly from the earthquake of 1867; one only of its 100 houses escaped destruction, and twelve people perished. It is an annexe of the commune of *Mouzaïville*, and traversed by the *Oued Djer*, which unites with the *Chiffa* to form the *Macfran* river. In the bed of

the Oued Djer, which the line traverses a kilomètre W. of the station, is a spring of alkaline and gaseous water not unlike that of St. Galmier. A steam tramway runs hence to Marengo.

78 kil. *Oued Djer*.

91 kil. *Bou Medfa*. Pop. 940.

[This is the station for the baths of **Hamмам R'Irha** (more correctly *Righa*), 12 kil. An omnibus meets the mail trains from Algiers and takes travellers to the establishment, at a cost of 2 f. 50 c. each person, without luggage. For a carriage (15 f.) it is necessary to write beforehand. The road, after crossing the railway and the Oued Djer, follows its left bank as far as 4 kil., the iron bridge, over which the route to Milianah runs to the left. The road continues to ascend the left bank of the river, now called Oued el-Hammam. At 5 kil. it branches off to the left from the Marengo road, and shortly begins the ascent by numerous zigzags to Hamмам R'Irha, 1800 feet.

The thermal springs occupy the site of the ancient Roman station of *Aqua Calida*. Nothing of any importance remains, but the fragments suffice to attest that it must have been a place of considerable importance.

The view from here is very beautiful. To the E. are seen the high peaks of Berrouaghia and Ben Chicao, and on a clear day some of the buildings of Médéa can even be distinguished. In front, on the opposite side of the valley, is the village of Vesoul Benian (see below), and to the right is the remarkable mountain of Zakkar, which rises above Milianah.

Hotels.—*The Grand Hôtel and Établissement des Bains* (pension, 12 to 14 f.), surrounded by a beautiful garden, together with the hot springs themselves, are the property of M. Alfonse Arlès-Dufour, to whom also belongs the *Bellevue*, a building about 100 yards lower down the hill. It comprises a *Civil Hospital*, as well as a second-class hotel. *H. de France*, in the village, homely.

The waters of Hamмам R'Irha are of two kinds—1st, the hot saline springs, the heat of which is about 158° Fahr. at their source, used for the baths; and 2nd, the gaseous and slightly ferruginous springs, which are used for drinking. The former contain chlorides of sodium and magnesium, as well as sulphates of soda, magnesia, and lime. One of the latter, called by the Arabs *Ain el-Karis*, issues from a pavilion in the village, at an easy walk from the hotel. It constitutes a most refreshing drink, and mixes well with wine. The effect of these waters on persons suffering from rheumatic or gouty affections is most beneficial. It is the only place within moderate distance of Europe where patients can undergo a course of baths during the winter with safety. March, April, and November are considered the best months.

The Baths are of three grades:—

1st. Those in the basement of the Grand Hôtel, which are supplied direct from the source. They consist of two *Piscines*, 80 feet × 15 feet. The water in the cool one is kept at a temperature of 99° Fahr., that in the hot one at 110° Fahr. They are open from 8 till 8 A.M. and 4 till 6 P.M. for men, and from 8 till 10 A.M. and 2 till 4 P.M. for women. Patients on leaving the baths, enveloped in blankets, recline for some minutes on couches in an adjoining chamber, and then usually return to their private rooms, where they are recommended to go to bed for 1 or 1½ hour. Tickets for these baths are supplied at the bureau for 1 f. 50 c.

2nd. Those in the *Bellevue* or Civil Hospital.—Public (1 f.), private (1 f. 50 c.) The temperature of these baths does not exceed 104° Fahr. They are somewhat devoid of comforts, and are not recommended for ladies or invalids.

3rd. Those which are confined solely to the use of Arabs—situated below the *Bellevue*.

The *Military Hospital*, to W. of the *Bellevue*, was founded in 1841.

Many pleasant walks and excursions may be made in the neighbourhood:—

To the beautiful pine forest of **El-Chaïba**, which clothes the slopes of the neighbouring mountains, and in which there are numerous footpaths. It commences 2 kil. to W.

To the *Tombeau de la Chrétienne*, drive of 3½ hours (carriage about 30 f.). See Rte. 2.

To *Milianah*, drive of 4 hours or

ride over the hills of 3 hours (carriage about 35 f.) See below.

To the summit of *Zakkar*, walk of 10 hours there and back : advisable to take a guide.

To the *Ravin du Voleur*, on the Marengo road. About 2 hours' drive to the Auberge Gaspard, where coffee can be had.

For sportsmen there is abundance of small game, and even wild boar, so that a few days or weeks may be spent very pleasantly at this establishment.]

98 kil. *Vesoul Benian*. Pop. 676. The village is situated at about 5 kil. to the S. of the line, on the top of a high hill, looking down into the Oued el-Hammam, and exactly facing the bathing establishment of Hammam R'Irha. It was founded by Maréchal Randon in 1853, on a spot called by the Arabs Ain-Benian ; it was peopled by 43 families sent over from Vesoul in the Haute-Saone, numbering 223 persons, and having at their disposal 270,000 f. to enable them to commence work. A concession of 30 acres was given to each, and now the village is in a high state of prosperity.

105 kil. *Oued Zeboudj*, a small village to the S. of the line, in a very feverish district.

110 kil. *Adelia*. The line passes through a tunnel 2200 mètres in length, and there attains its maximum elevation, being 500 mètres above the level of the sea ; after which it descends rapidly, passing another and shorter tunnel. There is a road hence to Milianah, by which the distance is shortened one-half. An omnibus meets each train.

120 kil. *Affreville*. Pop. 1724.

Named after Mgr. Affre, Archbishop of Paris, killed on the barricades of Paris, in June 1848, when endeavouring to stay the further effusion of blood. His last words were, "Pastor bonus dat vitam pro ovibus suis."

A diligence starts on the arrival of the train for Teniet-el-Ahd (see Rte. 5).

[The traveller can sleep at Affreville if necessary, but if his destination be Milianah he will prefer to go

there at once by private carriage, ordered beforehand from the hotel, or by the omnibuses which come to meet every train.

Milianah, 8 kil. to the N. Pop. 7345.

Beautifully situated on a plateau of the *Zakkar* mountain, the highest summits of which attain a height of about 5000 feet, and command splendid views over the plain of the Chélif.

The route from Affreville is extremely tortuous, following the course of the *Boutan*, a river descending from the *Zakkar* by numerous cascades, but it may be greatly abridged by foot passengers. The ascent takes nearly an hour and a half in a carriage. The drive is one of great beauty, amongst well-watered gardens, producing both the semi-tropical fruits common in Algeria and those of more northern countries, alternating with spots where the hand of man appears never to have interfered with the natural vegetation of the place.

The modern town is built on the site of the Roman *Malliana*, some traces of which now remain in fragments of columns and broken pieces of sculpture.

After the decline of Tlemçen, A.D. 1500, the inhabitants declared themselves free, but were placed by Baba Arouj under the dominion of the Turks. In 1830 the Emperor of Morocco took possession of the town ; and in 1834 Abd-el-Kader installed Ali Ben-Embarek as khalifa.

The French first marched against Milianah in June 1840, and found it deserted by the Arabs, who had set it on fire. The garrison left by them was blockaded by Abd-el-Kader for a long time, and suffered severely from disease and famine. When it was relieved subsequently by General Changarnier, of its garrison of 1200 men 700 were dead, 400 in hospital, and the remainder were hardly able to carry their arms. Had the relief been delayed but a few days longer the place would have fallen for want of defenders.

The plateau of the mountain on which Milianah stands is about 2400

feet above the sea level. The town is well built and clean. In the centre of the *Place* is an old Moorish minaret, now used as a clock-tower. The Arab town and houses have been entirely replaced by modern French streets, the principal of which are bordered with plane-trees, and have streams of water running down either side of the road. They are especially pleasant in summer and early spring, and the view of the plain of the Chélif from the walls is fine at all times.

Milianah is surrounded by a bastioned wall, in which are two gates, viz. the *Portes du Zakkar* and *d'Orléansville*.

There are barracks for both infantry and cavalry, and a military hospital, making up 500 beds.

The Catholic Church is a poor building in the *Place de l'Eglise*; and of the twenty-five mosques which formerly existed in Milianah, there now remains but one of any importance. The *Koubba of Sidi Mohammed bin-Youssef* is worth a visit.

A Normal School for European and native female teachers was instituted here in 1875.

The town is lighted by electricity, the dynamos being worked by water power.

The environs are very picturesque, especially to the S., where the road from Affreville passes through a ravine luxuriantly wooded. The *Avenue of Blidah* is the favourite promenade; and without the walls are many fertile gardens, watered by the streams which descend from the Zakkar mountain.

Just beyond the gate is a public garden, a favourite evening promenade in summer, which used to be well kept up under the Empire, but which has been greatly neglected since.]

After leaving Affreville, the line enters the plain of the Chélif (see p. 83). The traveller who passes through it in winter, and much more in spring, will see before him, as far as the eye can reach, a sheet of verdure diversified by masses of wild flowers of startling brilliancy. But in summer the

aspect is very different; the whole country is burnt up as if by a prairie fire; not a blade of green is visible; the heat is intense; and even the earth appears to be baked to the consistency of stone, and reticulated all over with wide and gaping fissures.

124 kil. *Lavarande* (pop. 1024), named after the general of that name killed before Sebastopol.

Between this and Duperré the road crosses the river Chélif by an iron bridge. The remains of a Roman one are visible about 100 yards lower down the stream on the right.

138 kil. *Les Arifs* (pop. 1116), created in 1879.

146 kil. *Duperré* (pop. 917), the name of the admiral commanding the French fleet in 1830. The creation of this village dates from 1859, when fifty families brought direct from France were established here. Near this have been discovered the remains of the ancient town of *Oppidium Novum*, to which succeeded the Arab town of *El-Khadera*, mentioned by *El-Bekri*.

The name of this city was identified by an inscription found by Commandant Boblaye in 1842, recording that a monument was erected to a local dignitary, Caius Ulpius, by public subscription, *ære conlato oppido novo*.

160 kil. *Rouina* (pop. 226), a village built by the Société Générale Algérienne, on the west bank of the Oued Rouina, which river comes from the mountains of Teniet-el-Ahd and falls into the Chélif close to the station. Its waters, when preserved by a barrage, will irrigate 4300 acres of land in the valley of the Chélif. Near it are the ruins of a Roman town.

At 4 kil. from the station, on the left bank of the stream, is a considerable deposit of iron ore.

170 kil. *St. Cyprien des Attafs*. Pop. 236. Not far from the station of Les Attafs is a village of Christian Arabs, *St. Cyprien*, founded by Cardinal Lavigier, Archbishop of Algiers in 1874, and peopled with young Arabs rescued by him during the

famine of 1867. It is exclusively an agricultural village under ecclesiastical control; it has a population of 203 inhabitants, a church, a mission-house, and an establishment of sisters. It is in a high state of prosperity. Labour is held in honour amongst the converts, and even the hours of commencing and finishing it are regulated by the sound of the church bell. The curé is also maire, and the sisters show the example of working in the fields to the Arab women, who gladly follow their example. This is one of the most interesting experiments that has been made in Algeria, and shows what can be done with Arabs by means of religion. A little to the east of the village is the large and handsome Hospital of Ste. Elizabeth, also built by the Cardinal for the use of the Arab tribes in the plain of the Chélif. This was solemnly inaugurated by him on the 5th of February 1876, and named in compliment to Madame Wolff, wife of the general commanding the division. On the N. side of the line, a little farther to the E., is a small village, Ste. Monique, also occupied by Christian Arabs.

173 kil. *Les Attafs*. Pop. 149. An Arab market every Wednesday. At a little distance on the left of the line are the ruins of *Djebel Temoulga*, a Roman camp, and on the right those of *Oued Taghia*, identified as the Roman station of *Tiganda Municipium*, consisting of a long aqueduct and the foundations of public buildings and ramparts. These are called by the Arabs *Kasr Bint-es-Sultan*, palace of the Sultan's daughter.

183 kil. *Temoulga*. A station constructed for the purpose of taking in the iron ore from the mines of *Djebel Temoulga*, situated 3 kil. to the S. In consequence, however, of the expense of transport the works have been suspended.

The *Oued Fodda* is here crossed by an iron bridge of one arch. The stream has a course of 100 kil. from its source in the highest peak of *Ouvaransenis*, of which a beautiful view is here obtained.

This mountain is one of the highest

in Algeria, the culminating point, *Kef Sidi Omar*, being 6500 feet above the sea. The ascent is from the E. side of the mountain, through a rich and well-watered country and magnificent forests; a very extensive view is obtained from the summit.

186 kil. *Oued Fodda*. Pop. 811. A village created by the military authorities, represented by General Wolff commanding the division of Algiers, in a portion of the plain, capable of abundant irrigation by the water of the *Oued Fodda* (silver stream). When the necessary dams are constructed this will probably become one of the principal centres of colonisation in the valley of the Chélif.

195 kil. *Le Barrage*. A station so called from a barrage or dam of the Chélif, a work of great importance. The preceding is a better station from which to visit it. This is hardly an excursion which we recommend to the general traveller. The road is difficult and bad (two hours by light carriage), and during the greater part of the winter the whole masonry is under water—nothing but a lake and a cataract is visible. Still it is possible to do it in the intervals between the morning and evening trains to Orléansville.

From the confluence of the *Oued Fodda* and the Chélif, for a distance of 12 kil., the united rivers flow through a steep and rocky bed. A point has been chosen at about $4\frac{1}{2}$ kil. from the junction, at which to establish a *barrage de dérivation* 85 mètres wide and 11·75 mètres high, intended to irrigate an area of 12,000 hectares, of which about 4000, situated on the left bank, include the town of Orléansville.

The right bank is watered by a canal crossing the Chélif a little above Ponteba. The entire length of the canals will be about 90 kil., of which $16\frac{1}{2}$ will be the common stream, $23\frac{1}{2}$ the Orléansville branch, and 50 the branch for the right bank of the river. It is calculated that the volume of water in the Chélif during the driest season of the year, from the 15th July to the 15th September, does not

fall below $1\frac{1}{2}$ mètre cube per second, and often attains 3 mètres. During the rest of the summer it varies from 3 to 5 mètres, and in winter it increases from 50 to 400 mètres per second. The canals have been calculated, however, to contain 3 cubic mètres per second. The waterfall has been utilised for supplying the motive power with which to furnish Orléansville with electric light.

203 kil. *Pontéba* (pop. 346), a small village close to the bank of the Chélif.

209 kil. **Orléansville.** Sous prefecture, with an area of 232,489 hectares. The city has a population of 3967 inhabitants.

Orléansville is a town of some importance; the area enclosed by its defences is very great, but a small portion only of it has been built over. The streets are wide, and all bordered with trees. The *Barracks* are extensive, accommodating 3000 men and 1000 horses; and the *Military Hospital* can furnish 500 beds. An abundant supply of water from the *Tsighaout*, 3 kil. S. of the town, has been brought into the town by two conduits; this is of a very bad quality, and is only useful for purposes of irrigation, washing, etc. Orléansville was for a long time without good water; fortunately in digging for a well in the communal nursery garden, an underground stream of excellent quality was discovered, which is raised by means of a steam-engine into reservoirs, and now supplies the town and railway.

An important Arab market, held near the *Porte de Milianah* every Saturday and Sunday, is attended by more than 10,000 natives, who bring horses, cattle, and the produce of *Ouarsensis* for sale. The value of the goods exhibited at these markets is said sometimes to reach £12,000.

The situation of Orléansville, standing as it does in the extensive plain of the Chélif, cannot be called picturesque, although it is surrounded at a considerable distance by hills. It was formerly entirely destitute of trees, but the Forest Department has made large plantations of Aleppo pines and

other trees around the town, which have succeeded very well, and now afford a grateful shade to the inhabitants. Between these and the walls the space has been planted with Australian trees, so that Orléansville is actually one of the most shady places in the country. This was much required, as the heat in summer is very great; the climate, however, is not unhealthy. The town has been founded on the site of the Roman *Castellum Tingitanum*, and is called by the Arabs *El-Esnam*, signifying "the Idols," in consequence of numerous pieces of sculpture having been found in the locality.

One of the most interesting discoveries regarding the history of the African church was made here in 1843—the *Basilica of St. Reparatus*. This, according to Cardinal Lavigerie, is "la plus ancienne authentiquement datée de tout l'Afrique du nord." Unfortunately it has been entirely destroyed, and if any of its beautiful mosaic floor remains, it is completely covered up. M. Berbrugger said of it in 1857: "Il était devenu une écurie publique à l'usage de tous les individus qui n'avaient pas chez eux assez de place pour loger leurs chevaux et bêtes de somme."

All that is known of this interesting building has lately (1895) been published by the Abbé Ibos, curé of El-Biar, in a brochure, *Notice sur la Mosaïque d'Orléansville*, wherein he has given a beautiful reproduction of the original drawing of the mosaic made by M. Cognon in 1876.

This covered the whole extent of the floor, and contained a great variety of geometric and floral designs, fishes, etc. In the centre of the nave, near the eastern apse, is an inscription containing the date of its foundation in the 285th year of the Mauretanian era, corresponding to A.D. 324, that of the Council of Nice. In the eastern apse, between two columns, another records the interment here of St. Reparatus, bishop of the diocese, in the year 436 of the same era, A.D. 475.

There are two curious specimens of abracadabra, one of which, on the

words *Sancta Ecclesia (sic)*, is as follows:—

A I S E L C E C L E S I A
 I S E L C E A E C L E S I
 S E L C E A T A E C L E S
 L E C E A T C T A E C L E
 L C E A T C N C T A E C L
 C E A T C N A N C T A E C
 E A T C N A S A N C T A E
 C E A T C N A N C T A E C
 L C E A T C N C T A E C L
 E L C E A T C T A E C L E
 S E L C E A T A E C L E S
 I S E L C E A E C L E S I
 A I S E L C E C L E S I A

The other is on the words *Sodreca Sacerdos* and *Marinus Sacerdos*, possibly two saints who are buried below.

The remains of St. Reparatus were discovered in a vault below his inscription, and were carefully collected by Mgr. Dupuch, Bishop of Algiers, and taken to the cathedral there to await "le jour de son retour triomphal dans sa basilique restaurée," an event of which there seems no probability.

There is another mosaic in the garden of the Military Hospital; it appears to have been the floor of a bath. It contains a representation of a hunting scene; in the upper portion two men are attacking a wild boar, and in the lower a panther is advancing towards an unarmed rider; it also bears the inscription:—

SILIQVA FREQVENS FOVEAS MEA
 MEMBRA LAVACRO.

Orléansville was definitely occupied by the French in April 1843.

[An excursion may be made to **Ouaransensis**; the name is more correctly *Wansherish*, probably a Berber corruption of the Latin *Anchorarias*. This may be done in one day by carriage, and there is a Borj occupied by the administrator of the district, at which a traveller could possibly obtain accommodation. The scenery is very fine.]

A short distance from Orléansville the line crosses the *Tighaout*, 209 kil.; the *Oued Lalla Ouda*, 210 kil.; the *Oued Arousa*, 215 kil.; the *Oued Si Sliman*, 216 kil.; and arrives at

224 kil. *Oued Sly*, a village created by the Société Générale Algérienne, on the river of the same name, an affluent of the Chélif. A barrage constructed here irrigates about 12,000 acres of land. This is on the boundary between the provinces of Algiers and Oran.

232 kil. *Bou Kadir* or *Charron*.

243 kil. *Merdja*. The land about here is marshy and extremely unhealthy. The marsh of Sidi Abid, from which it derives its name, abounds in antelope. Bustards also are occasionally found here.

254 kil. *Oued Riou*. The name of a stream descending from the Ouaransensis to the Chélif.

Near the station is the village of **Inkerman** (pop. 1298), one of the most prosperous in the valley of the Chélif, and the residence of the administrator of the district.

It is well watered, has an important cattle and grain market, and quarries of excellent stone, similar to that obtained from Malta and Port Mahon in the Balearic Islands.

[An excursion well worth making from this place is to **Mazouna**, the capital of the Dahra, or the mountainous ridge which lies between the Chélif and the sea. There is a regular series of omnibuses from Inkerman to Renault, and the driver for a small extra gratuity will gladly take the traveller to Mazouna, either going to or returning from Renault.

A tolerably good road leads from the railway station, crossing the Chélif by a bridge. An important Arab market is held on the right bank every Friday.

A few kilometres farther the road begins the ascent of the *Dahra*, a name which signifies *back* in Arabic. It describes well the appearance of these hills from the S.; on entrance they are found broken up into a multitude of ridges, the highest of which is about 600 mètres above the sea. The *Dahra*,

both in respect to its physical conformation and its population, is a miniature Kabylia; but though it long maintained its independence, and even acted an important part in the early Moorish wars and revolutions, it was conquered by the Arabs in the 14th century and partly occupied by them. The language spoken is Arabic, with an infusion of Berber words.

In the communal douar of Ouari-zane, at the foot of the mountain, there is a station of the remount. Five or six stallions from Mostaganem are usually kept here.

At 18 kil. from the station there is a wayside fountain, the only fresh water since leaving the Chéliif, and at 21 kil. the road crosses the Oued Temda, an affluent of the Ouari-zane, and enters a beautiful valley fertilised by copious springs and laid out in gardens and orchards. To the right is the village of Oulad Mizian, where the road to Mazouna branches off, and to the left, that of Oulad Sidi El-Akhdar; the route now skirts the west side of an undulating basin of excellent land, and soon reaches

29 kil. The village of *Renault*. Pop. 624. This was founded in 1845, and called after a general of that name who had passed a great part of his service in Algeria, and had assisted at the campaign which resulted in the surrender of Kabylia. He subsequently fell at the siege of Paris.

The village is in a highly prosperous condition, and contains several *auberges*, all tolerably comfortable. It is built in a plain, 3 or 4 kil. in diameter, surrounded by a chain of low hills. A mamelon, crowned by a fort, divides it into two portions, each of which contains about fifty houses. There can be no doubt that this was a Roman station; a building of cut stone was discovered within the site of the present Borj, which was unfortunately destroyed to provide materials for building the church steeple. The writer saw on the spot a Roman jar, perfectly well preserved, 3 mètres in circumference; it was covered with stamps, one only of which was legible, it contained the letters INDEOW.

About 12 kil. to the N. may be seen the ruins of a Roman fortified position. On each side are posterns and staircases, cut in the solid rock, and numerous columns, cisterns, and remains of houses still exist.

From this village a good road of about 5 kil. long leads to Mazouna, but the traveller will generally find it more convenient to branch off from the village of Oulad Mizian, and after having visited Mazouna, go on to Renault to pass the night.

Coming close to *Mazouna*, a view bursts upon the traveller which would repay a long journey. The hills above are bare and barren, but over against *Mazouna*, and on the opposite side of the ravine of *Ain-Tounda*, a dense forest of fruit trees rises high up the hill, and spreads far down towards the valley of the *Chéliif*; and as the gardens composing it are watered, it is of the deepest green all through the summer. Probably nowhere else does native cultivation offer so pleasing an aspect. The trees cultivated are the apricot, pomegranate, plum, quince, lemon, almond, jujube, pear, with a few peach, olive, karoub, and fig, but this last produces the best fruit on unirrigated ground.

Mazouna, with the suburb of *Bou-Halloufa*, on the opposite side of the ravine, has a population of 2000; that of the whole commune of Renault, 26,908. The only European in the town is a French schoolmaster appointed by Government. Nothing is manufactured here except a few bricks and a little pottery, which is sometimes painted by the women, like the Kabyle vessels. It is said in Mazouna that one-half of the population is Turkish by descent, but the men have mostly Arab features. The young girls are pretty.

Descending through the town to the bottom of the ravine, the visitor will come to a small but picturesque cascade. The stream has worn for itself a deep channel, and falls into a pool below. The rocks around are hung with ferns and creeping plants, amongst which, and behind the waterfall, a bathing place has been screened off,

by a dry stone wall, from public observation. In the market-place above, a well-grown aspen tree is pointed out, which was planted by the messengers who brought to Mazouna the news of the French landing at Algiers.

The Dahra has a pop. of 22,000, governed by Kaid. Those of Berber descent live in stone villages, the Arabs in tents; the latter are most numerous near the Chélif, the former in the mountains. The soil is fertile and the climate temperate, and it is hoped that in a few years there will be a considerable European population here.

From Inkerman there is a regular service of omnibuses to *Ammi Moussa*, a military station.

At 14 kil. from this town, on the left of the road leading to Orléansville, is the interesting Roman ruin called **Kaoua**. It was evidently a citadel built of large finely-cut stone, surrounded by a wall, all being in so perfect a condition that the minutest details of cisterns, stables, staircases, etc., are visible. On the keystone of the entrance gate is sculptured a crown, within which is the inscription SPES . IN . DEO . FERINI . AMEN. The name of Ferintus is unknown; he was probably some local magnate living about the 4th century. There are many other Roman remains in the district of Ammi Moussa.]

263 kil. *La Djidiouia* or *St. Aimé* (pop. 713), a village created in 1872, and named after Madame Osmond, wife of the general commanding the province.

The Oued Djidiouia is a little to the east of the town, and about 7 kil. farther up there is a barrage well worthy of a visit. The dyke or dam is built of cut stone and hydraulic cement. It is 50 mètres in length, 17 in height, above the foundations, which have a farther depth of 11 mètres; the breadth at the base is 11 mètres, and at the top 4 mètres. This contains a lake winding amongst the hills to a distance of 2½ kil., and containing 2,500,000 mètres of water. The canal runs along the S. and E. sides of an

amphitheatre of hills, and traversing a tunnel 224 mètres in length, reaches Ste. Aimé, and passes on to another village farther to the W., called Hamadana, created in 1876. It is calculated that this water, besides supplying the villages, should irrigate about 3400 hectares. The great difficulty regarding these barrages is to prevent them filling up with sand washed down by the rain. When the writer visited this in 1893 it had become entirely silted up, but it had been fitted with extensive and complicated machinery for cutting up the clay and forcing it out by the pressure of water from within.¹

To the E. of Ste. Aimé, in an old bed of the Djidiouia, are the remains of what is called a Roman barrage; the construction is of large blocks of concrete, without any trace of cut stone, and neither in the style of masonry nor in its outline does it resemble the work of that great people. It is more probable that it was the work of the Tlemcen dynasty.

283 kil. *Les Salines*. So called from the salt lake of Sidi Bou Zain, to the right of the line, containing an area of 4000 acres.

296 kil. **Relizane**. Pop. 6975. Here the railway from Mostaganem to Tiaret crosses the main line.

The country round is well irrigated, and the town is supplied with water from the Mina, which flows about 3 kil. to the W. At a place where the river left the flat alluvial land, and broke in rapids to a lower level, a barrage of derivation has been built. This is simply a dyke with sluices, which prevents the water from entering the rocky bed into which it formerly descended, and diverts it into two lateral canals, from which it is distributed to the E. and W. Near the town a force-pump sends it into a large filter for the supply of the inhabitants. This barrage is capable of irrigating 8000 hectares.

The name of the river is probably

¹ This apparatus as well as all the barrages in the valley of the Chélif have been described in the Foreign Office Annual Series of Consular Reports, No. 1196 of 1893.

taken from that of the Roman town, the ruins of which are still traceable a mile or two to the S.

315 kil. *L'Hillil*. A small village forming an annexe of Relizane on the Oued Illil, an affluent of the Mina, on which there is a small barrage which irrigates the country round about.

[An interesting expedition from l'Hillil is to the remarkable and little-known Arab town *El-Kalâa* (the fortress).

The kaid assured the author, who visited it in May 1877, that he was the first Englishman who had ever been there, and that very few French, except those connected with the administration, ever found their way to it. Nevertheless, the expedition can be done between the arrival of the first train from Relizane in the morning and the departure of that to Oran at night. A good carriage-road has been constructed, and an omnibus runs every morning, returning in the afternoon. The traveller should take his breakfast with him. If he happens to occupy a prominent position of any kind, or is recommended to the kaid, he is sure to be hospitably entertained, but otherwise he runs the risk of starvation if he depends on the resources of the village.

El-Kalâa is a town of Berber origin 17 kil. S. of l'Hillil, and 36 kil. N.E. of Mascara, picturesquely situated on the S.W. slopes of Djebel Barber, which descends almost perpendicularly to the Oued Bou-Mendjil. It occupies the mountainous centre of that *massif* situated between the Mina and the Habra, which was at one time occupied by fractions of the great tribe of Houasa. The village is divided into several portions, each situated on a projecting spur of the mountain, and separated from the next by a deep ravine. The houses are of stone, but in a dilapidated condition. The place is celebrated for its carpets, which resemble those usually obtained from Smyrna; nearly 3000 are made every year, and they are everywhere held in high esteem; the cost of them on the spot is about 10 f. a square mètre.

They are made by the women; the process is most curious, but it will be difficult for the *male* stranger to obtain access to a house where they are being made. At the bottom of the hill, along the banks of the river, are beautiful gardens of fruit trees, especially oranges and lemons. The population is about 300. The only European in the village is a schoolmaster, who, as at Mazouna, is sent to teach the children French. They are most apt pupils, and some of their exercises are quite astonishing.

It is uncertain whether this was ever a Roman station, but the remains of two cisterns still visible are wonderful like the work of that people.

The place is said to have been built by a chief of the Houara tribe, Mohammed bin Ishak, about the middle of the 6th century of the Hejira, and after the extinction of that tribe it fell into the hands of the Beni Rachid, a branch of the Zenati, from Djebel Amour. It eventually submitted to the sovereigns of Tlemçen.

About the end of the 15th century of the Christian era, on the decline of the Beni Zeian dynasty of Tlemçen, the Arab confederation, known by the name of Mehal, declared itself independent. They descended from the High Plateaux, and invaded the plains of the Chélif and the Mina, and established themselves firmly at Kalâa, Ténès, Mostaganem, and Mazouna.

The Spanish occupation of Oran commenced about the beginning of the 16th century, and the Beni Rachid became in turns their allies and their tributaries. This state of things continued till 1517, when Baba Arouj, who had already taken Algiers, appeared at the head of a Turkish army. The Mehal, under one of their most celebrated chiefs, Hamid el-Abd, were defeated; Ténès and Kalâa fell into the hands of the Turks, and Tlemçen opened its gates to Arouj and recognised him as its sovereign. The Sultan Abou Hammon, dispossessed of his country and put to flight by the corsair, sought the aid of the Spaniards, who, having all their commerce cut off by the Turks, gladly

sent a force to replace their old ally on his throne. It was commanded by Don Martin d'Argote, who eventually marched on Kalâa, which was defended by Ishak, elder brother of Arouj, with 500 Turkish infantry. After a spirited resistance he agreed to capitulate, on condition of being allowed to leave with arms and baggage, but no sooner had the Turks surrendered the place than the Spaniards fell upon them and put them all to death. The Spaniards then continued their march to Tlemçen, took that town, and pursued Arouj to the Rio Salado, where he and all his people were killed.

Kalâa became subsequently annexed to the regency of Algiers, and so continued till the French conquest. After the fall of the Turks, the people refusing to recognise the Emir Abd-el-Kader, he attacked the town, and after a siege of three days he took it and gave it up to pillage. It submitted to the French in 1842, joined the insurrection of Bou Maza in 1845, was retaken by the French with considerable loss, since when it has remained tolerably quiet. Kalâa was used by the Turks as a place of deportation for all their most turbulent soldiers, and at the present day there are two distinct sections of the population, the Kouloughlis or descendants of Turkish fathers, and the native race, a mixture of Berber and Arab.

There are three other similar villages in the neighbourhood. *Tiliouanet* on the banks of the stream bearing the same name, 4 kil. E. of El-Kalâa. The word signifies *coloured*, on account of the perpetual verdure of the place. *Debba*, 800 mètres S. of El-Kalâa, on the same river as that town, and *Mesrata*, 2 kil. S.W., on the lower part of the Oued Bou-Mendjil. It was at one time of considerable importance, but was greatly destroyed by landslips in 1845. The traveller will not fail to remark the great number of koubbas, or tombs, of local saints in every direction.]

332 kil. *Oued Malah*, situated on a river of that name. In the immediate

vicinity is a village called *Romri*, and near the station is a tract of brushwood called the Forest of Kerouia.

346 kil. **Perrégaux**. Pop. 2498. Named after the well-known general who fell at the second siege of Constantine. Arab market every Thursday. This is the place where the railway from Arzeu to Saida crosses the main line.

At 9 kil. to the S. is the great barrage of the Oued Fergoug, constructed by M. Debrousse. It is situated at the junction of three streams—the Oued Fergoug, the Oued Terzoug, and the Habra. The total length of the dam, including the *diversoir*, is 440 mètres; its thickness at the base is 40 mètres, and at the top $4\frac{1}{2}$ mètres; its depth below foundation 11 mètres. It forms an immense lake, containing when full 38 millions of cubic mètres of water.

On the 15th December 1881 it gave way under the pressure of exceptionally high floods, drowning upwards of 400 persons, besides losing all the water supply, and laying dry the system of irrigational canals in connection with it. It has now been completely repaired and is full of water.

The sufferers were mostly Arabs and Spaniards; in the town of Perrégaux there was a depth of 5 feet of water in the houses and streets, and long stretches of embankments, both on the Oran and Algiers line and on that to Saida, were swept away. This has been reconstructed, but the machinery for opening the sluice gate is defective.

This work, as well as the railway between Arzeu and Saida, is due to the enterprise of a private company, one may almost say to the unaided exertions of the late M. Debrousse. He received no guarantee of interest from the State, but a concession of 24,000 hectares of irrigable land in the plain of the Habra, between Perrégaux and the sea, and the privilege of collecting the alfa over a vast area of land on the High Plateaux [see Rte. 27, from Arzeu to Saida].

360 kil. *L'Habra*.

370 kil. **St. Denis du Sig**. Pop.

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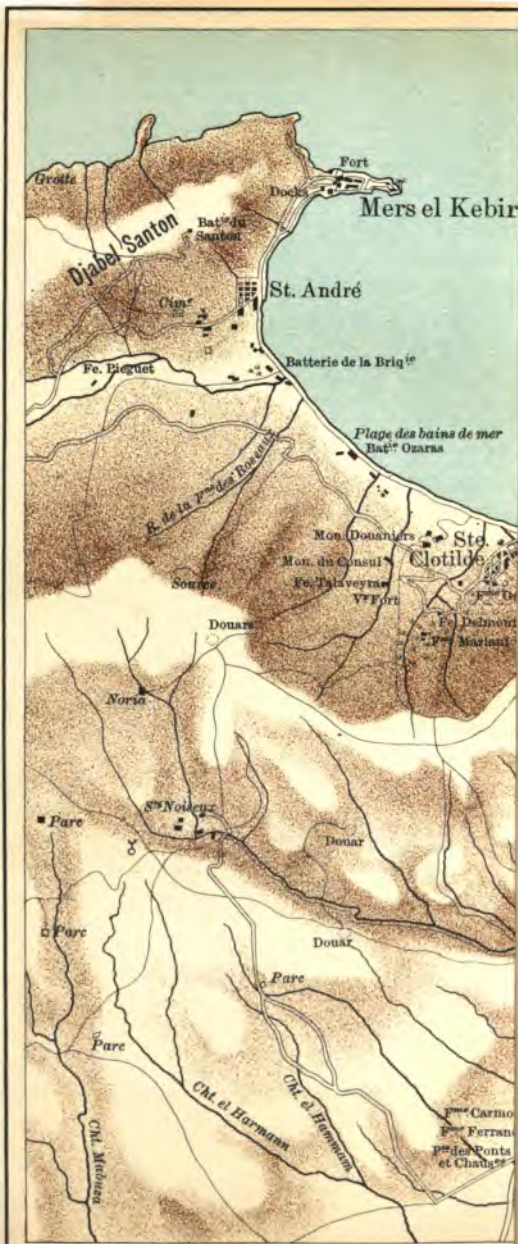
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9987. The town is built on the right bank of the *Sig*, about 500 yards from the railway station, in the middle of a large and fertile plain. The streets and squares are well shaded by trees, running water everywhere abounds, and there are numerous gardens both public and private in the environs; a handsome church has been built, principally by the munificence of two individuals, and there is a civil hospital capable of containing 300 beds.

This district owes its fertility entirely to artificial irrigation. The Turks erected a barrage about 3 kil. S. of the town, at a point where the river is contracted into a narrow channel as it enters the plain. An inundation destroyed this, and the Engineer department commenced a new one in 1853, which was completed and greatly enlarged by the *Ponts et Chaussées* in 1858, and which was capable of collecting 3 millions cubic mètres of water, and of irrigating a surface of 2000 hectares of land in winter and 800 in summer. This was sufficient in ordinary times, but in years of drought when more water was required it frequently failed, so it was determined to build a much larger one, 10 kil. higher up the stream. This was successfully accomplished; it contained 18 millions cubic mètres of water, and was filled for the first time during the winter of 1884-85. Some idea may be formed of the volume of water thus stored up, by imagining an acre of land piled up with water to the height of Mont Blanc! The writer was standing on the lower barrage on the 8th February 1885, at 5 P.M., when the upper one gave way; in a wonderfully short time the whole country was submerged; the smaller barrage went also; the water stood to a depth of 2½ mètres in some parts of the town of *Sig*. All bridges were destroyed, and the rich and flourishing gardens and farms in the vicinity were almost obliterated. Had this happened during the night, as was the case at *Perrégaux* two years previously, the loss of life must have been terrible; as it was, people were warned in time and few were lost.

This also has been restored. Its interior height is 30 mètres, and when full it will contain 18,000,000 cubic mètres of water. It is provided with a sluice gate worked by hydraulic machinery. The *Union du Sig*, at about 2 m. from *St. Denis*, is an agricultural association, of which, however, the principal object has not been realised—the association of capital and labour. It is worked by a company having its seat at Paris.

The *Habra* and the *Sig* unite to the N. of this place in a marsh, and subsequently reach the sea under the name of *Oued Macta*, at a little bay between *Arzeu* and *Mostaganem* (see *Rte. 27*).

376 kil. *L'Ougasse*.

381 kil. *La Mare d'eau*. These are two small villages, the latter near the forest of *Moulai Ismail*, where *Don Alvarez de Bezan* was signally defeated in 1701, and where six years later the Moroccan chief, *Moulai Ismail*, had his army almost entirely destroyed.

395 kil. *Sainte-Barbe de Tlélat*. Pop. 1912. A village on the bank of the stream called *Le Tlélat*, at the extremity of the plain of the same name. The country round is watered to a certain extent by a small barrage on the *Tlélat*. This is the terminus of the "Ouest Algérien" Railway (see *Rte. 26*).

404 kil. *L'Arbal*, more correctly *Ghabal*, a village situated about 7 m. from the station which bears its name. Numerous Roman ruins in the vicinity. It was probably the Roman *ad Regias*.

411 kil. *Valmy*. Created in 1848. Pop. 559.

416 kil. *La Senia*, a pretty village of 484 inhab. Junction of line to *Ain-Temouchent*.

421 kil. KARGUENTAH (ORAN).

CITY OF ORAN.

Capital of the province, residence of General Commandant, and of the General commanding subdivision, Intendance Divisionnaire, Préfet and Bishop.

Population—

French . . .	19,037
Jews . . .	7,448
Mohammedans .	12,087
Other nationalities	35,619
Total .	74,191

Oran is not one of the Algerian towns which can claim a high antiquity; for although some writers attempt to identify it with the *Portus Magnus* or *Quiza* of the Romans, the evidence is but vague; and no traces of that nation's occupation have been found here, with the exception of a few coins.

It appears to have been founded in the beginning of the 10th century by two Arab merchants from Spain, who, frequenting this coast for purposes of commerce, obtained leave from the dominant tribe to form a small settlement there. They called it "Wahran," meaning "a ravine"; and it remained, until the date of the Spanish conquest, merely a village beside the stream, with a small harbour, and a fortification on the shore. The little town soon became, however, of some importance on account of its exports, and frequently changed masters. The original founders were driven out in 909, after holding it for seven years in the name of the khalifas of Spain; and after being several times burnt and rebuilt by the contending tribes, the town fell into the hands of the *Almoahides*, in the middle of the 12th century. These held it until their overthrow in the year 1270, by the tribe of the *Bin-Zian*, or *Zianides*, after which Oran became a part of the new kingdom of *Tlemçen*. It maintained, however, a considerable independence, deriving power from the importance of its commerce with Italy; and appointed its own governor, simply paying customs to *Tlemçen*.

Being one of the nearest ports to Spain, Oran had always an intimate connection with the Moors in that country; and received fresh inhabitants as the Mohammedans retreated before the conquests of the Christians. About this period *Moulaï bin-Hassan*, one of the last Moorish kings of

Granada, took refuge here for a time, when driven from his kingdom by dissensions with his son and reverses in the wars with Castile; and in A.D. 1500, on the final triumph of the Cross over the Crescent in the Peninsula, the expelled Moors, although at first received with but little hospitality, settled here in great numbers; and under their influence the export trade of the town gave place almost entirely to the pursuit of piracy.

The exiles did not remain long unmolested in their new home. Ferdinand the Catholic turned his thoughts to the extirpation of these dangerous neighbours; and in the year 1505, through the persuasions of Cardinal Ximenes, despatched a force, under the command of Don Diego de Cordoba, against *Mersa-el-Kebir*. The king himself lacked funds for the enterprise, but these were supplied by the Cardinal; and the expedition, in consequence, gained the name of the "Crusade of Ximenes de Cisneros," and was regarded as a holy war, all who fought in it having indulgence from certain fast-days for the remainder of their lives. The port was soon overcome; and in 1509 another fleet sailed from Carthage led by the Cardinal himself, and, assisted by land forces from *Mersa-el-Kebir*, took possession of Oran.

The Spaniards had now a firm footing in Africa; but they did not extend their advantages, contenting themselves with fortifying Oran, converting its mosques into churches, and appropriating its treasure to Christian uses; besides massacring its inhabitants and introducing the Holy Inquisition.

In the year 1519 the Turks, led by the pirate *Barbarossa*, attempted to take possession of the town; but they were defeated by the governor, the *Marquis of Gomez*, with great loss.

The Spaniards found their settlement at Oran a barren and expensive honour, and at one time, before the battle of Lepanto in 1574, thought of abandoning it, when a change of fortune in Europe enabled them to give more attention to Africa. They could not, however, resist the increasing con-

quests of the Turks, who, having overthrown the native kingdom of Tlemçen, consolidated their power throughout the Barbary states, and deprived Spain of the tribute it had received from the neighbouring tribes. During the next century they watched the Christians jealously; and having driven them from all the small places over which they had obtained sway, waited until an opportunity should offer to take possession of Oran itself.

In the year 1700 Philip V. succeeded to the throne of Spain; and the civil war which ensued between him and the Archduke Charles prevented him from sending succour to Oran when it was attacked in 1708 by the Bey of the province, under orders from Algiers. After a brave but hopeless defence, the garrison was obliged to capitulate, and Oran became the chief town of the Beylick.

Spain could not quietly acquiesce in this disgrace; and after tranquillity was restored in Europe by the Peace of Utrecht, Philip despatched a fleet, which, in 1732, regained possession of the town. The garrison, being now more than ever subjected to attacks from the Turks, was considerably increased, and succeeded in holding their difficult and somewhat useless position until 1790, when a fearful earthquake, which continued for several days, almost annihilated the place; and while it was yet suffering from the loss of fortifications, munitions of war, and a third part of its garrison, it was attacked by the Bey of Mascara. Nevertheless, with reinforcements from Spain the Christians succeeded in defending it until the middle of 1791, at which time a treaty of commerce between the regency of Algiers and the Spanish government was entered into and enabled Oran to make an honourable capitulation. In March 1792 the Spaniards finally quitted Africa, carrying with them their arms, but leaving standing such of the fortifications as the earthquake had spared.

For the next forty years Oran was merely an unimportant town of the Beylick of that name, and was rebuilt and repopulated chiefly by Jews and

Arabs; but the government was not such as to encourage either commerce or industry. The Beys followed each other in quick succession, generally meeting with violent deaths; they perished by poison or pestilence, or died upon the field of battle while levying tribute from rebellious tribes; and some were executed by their masters at Algiers for misappropriation of the levied tribute. They indulged in every form of tyranny and vicious pleasure; and when the French took possession of Algiers in 1830, Hassan, the last Bey of Oran, immediately offered them his submission, and was speedily shipped off to Syria.

For a short time the Beylick was given by Marshal Clauzel to Sidi Ahmed, a prince of Tunis; but the Marshal's policy not being approved by the Home Government, Oran was occupied in 1831; and since that time the French have remained undisturbed masters of the town, although the desultory war with the neighbouring tribes, and especially with Abd-el-Kader, was continued until the year 1847.

The town of Oran is situated at the head of the gulf of the same name, about 600 m. S. of Marseilles, and 220 m. E. of Gibraltar. Like Algiers, it is triangular in form, and presents a striking aspect from the sea, rising on the steep slope of the *Djebel Murdjadjo*.

The coast, from Cape Falcon on the W., is partly flat and partly rocky. Cape Ferrat on the E. is rocky and precipitous, the cliffs around the last-named headland rising more than 1000 feet above the water; and the bay is fully exposed towards the N.; but the small fortified promontory of *Mersa-el-Kebir*, jutting out into the sea about 2 m. to the W., forms at all times a secure and excellent harbour. At the extremity of the point is a light-house.

Oran has two harbours: the old or inner one is small but commodious, with an area of 10 acres; the new or outer one has 60 acres, with 1200 yards of breakwater, and 828 yards of quays; they are capable of containing

a considerable number of vessels of the largest size.

A considerable trade is carried on between Oran and England in alfa fibre and cereals, wine and marbles. The exports from Oran are about on a par with those from Algiers.

In 1792 Spanish Oran was almost destroyed by an earthquake, and the modern city is quite French in character. It has undergone an entire transformation of late. The old portion, built low down in the ravines, and around the harbour, still remains unchanged, but an entirely new quarter has arisen on the breezy heights towards the E. This was rendered possible by the destruction of the old ramparts, and the construction of new defensive works at a much greater distance from the town. The highest part is the *Place d'Armes*, a handsome square with a garden in the centre, and a *Mairie* occupying the entire eastern side. It contains a fine staircase of Algerian onyx. From the E. runs the *Boulevard Nationale*, in the direction of the *Porte de Mascara*; in it is situated a new and imposing *Jewish Synagogue*. The pleasantly-shaded Promenade de l'Etang is the most popular place of resort. It has a splendid view of the sea, port, and gulf. The military band of the garrison sometimes plays here.

Churches and Mosques.—These are not very remarkable. The most important is the *Cathedral of St. Louis*, in the Place de l'Eglise. This was formerly a chapel belonging to a convent of monks of the order of St. Bernard; and afterwards, about 1710, was turned into a synagogue, and was used as such for more than twenty years. The present building was erected in 1839, under M. Dupont as architect. A stone, on which the arms of Cardinal Ximenes are carved, was found in the debris of the old Spanish church, and now forms the keystone of the arch in front of the choir. On the vaulted roof of the latter is a fresco of the landing of St. Louis at Tunis, painted by M. St. Pierre. The site of the ancient chapel is at the back of the choir; and

a small portion of the walls of the original building are incorporated in those of the modern church.

The *Church of St. André*, in the Place des Carrières, is a small edifice, formerly a mosque, possessing nothing worthy of particular notice.

The *Eglise de la Mosquée* is in Kara-guentah, of which it is the parish church.

The old Jesuit school and chapel has been appropriated by the municipality, and will be turned into a secular school for girls; a large Lycée is being built for boys, and there is an excellent girls' school kept by the *Sœurs Trinitaires*.

The *Grand Mosque*, in the Rue Philippe, is entered by a porch decorated and restored by M. de Sorbier. At the entrance of the mosque itself stands a white marble fountain said to have been originally brought from Spain, at a cost of 5000 f. The interior consists of a large dome, supported on low columns, and destitute of ornament or decoration. This mosque was founded to commemorate the expulsion of the Spaniards from Oran, with the money procured from the ransom of the Christian slaves. There is a pretty octagonal minaret attached to this building.

The only other mosque of any importance is that of *Sidi el-Houari*, below the Kasba; it is held in great veneration by the Arabs; part of it has been taken by the French as a military store.

The *Theatre*, situated near the Promenade de l'Etang, is very small, although commodiously arranged. It can accommodate only about 700 persons. A French company plays during the winter months, and in summer performances in Spanish are generally given by a company from Carthage or elsewhere.

A most interesting **Museum**, formed under the auspices of the *Société de Géographie et d'Archéologie*—in other words, by its indefatigable President Commandant Dumaëgt—is lodged in what was once a school, in the Rue

de Montebello, near the Place Kleber (open from 1 to 5 P.M.) It is the most important in the colony. It is intended to collect here all the antiquities found in the department. Amongst other treasures are the fine mosaics from St. Leu (see p. 285); they consist of five panels, now let into the wall, of mythological subjects. From a *cippus*, found in the house where they existed, now also in the Museum, it appears to have belonged to Sextus Cornelius, of the equestrian order, procurator, with a salary of 60,000 sesterces from the province of Mesopotamia. The monument was inscribed in his honour by his heir, Marcus Cæcilianus, in accordance with his testament.

The *Château Neuf*, built by the Spaniards, is the citadel. It is the residence of the general commanding the division, who occupies that portion of the building which was in former times the palace of the Beys. The other part of it is used as a barrack.

• The *Château Vieux*, or *Kasba*, was the ancient citadel of Oran, and was several times surrendered to foreign troops; in 1509, to the army of Ximenes; in 1708, to Mustapha bin-Youssef; and again, in 1732, to the troops of the Duc de Montemar. Like the *Château Neuf*, it consisted of two parts, the higher being the residence of the Spanish Commanders, and comprising a chapel, among many other buildings; and the lower containing the arsenal and barracks. The upper part of the *Kasba* was entirely destroyed by the earthquake of 1790; but the lower part is still used as a barrack and military prison; the civil prison is at Karaguentah, and capable of containing 300 persons.

Oran is strongly fortified. The *Fort de la Moune* is at the western extremity of the harbour. *Fort St. André*, in the centre of the town, formerly mounted thirty-six guns. Beyond Fort St. André is *Fort St. Philippe*, built to replace the old

[*Alaeria*]

Castle of the Saints, called in Spanish "*Castillo de los Santos*." Above, on the heights of the *Pic d'Aidour*, more than 1000 feet above the sea, stands the *Fort Santa Cruz*. The view from this fort is magnificent. A little chapel has been erected just below, to commemorate the cholera year of 1849; this subsequently had a tower added, surmounted by a colossal statue of the Virgin, a replica of that of *Nôtre Dame de la Gardé* at Marseilles; it is styled *Nôtre Dame de la Salut de Santa Cruz*. Below this is a modern fort built on the site of the ancient Spanish Castle of St. Grégoire, mounting four heavy guns. On the height above *Mers-el-Kebir* is a fort armed with two 14-ton guns, which commands the coast on both sides, and crosses fire with a similar work at the *Point du Ravin blanc*, to the E. of the town.

There is a subterranean communication between all the ancient forts, the galleries passing underneath the town, mounting and descending the various hills. Permission can be obtained to visit these by application to the Colonel of Engineers.

The walls which surround the city contain nine gates, viz.—

Porte de Mers-el-Kebir; *Porte de Santon*; *Porte du Ravin*; *Porte de Tlemçen*; *Porte Sidi Charmi*; *Porte du Cimetière*; *Porte de Mascara*; *Porte de Mostaganem*, and *Porte de l'Abattoir*.

Among the public buildings not yet enumerated should be mentioned the new *Military Hospital*, adjoining the Cathedral of St. Louis, an imposing edifice, capable of accommodating 1400 men.

The Civil Hospital is on the high ground at Karaguentah, holding 600 patients.

In the Place de l'Hôpital, just opposite the tunnel communicating with the Rue de l'Arsenal, is a house now used as military quarters, once the *Inquisition*; an inscription let into the wall states that it was built at the expense of the State in 1772.

A visit should be paid to the negro quarter, peopled by nearly 3000 of that race, and Arabs.

Oran is well supplied with water. The stream *Ras-el-Ain*, which rises about a kil. beyond the walls, is brought by means of an underground tunnel into the town. A further supply has been brought from the fine spring at Brédéah, at 25 kil. on the road from Oran to Temouchent.

ENVIRONS OF ORAN.

7 kil. **La Senia**, a small village, the inhabitants of which are all employed in agriculture, and in the cultivation of vegetables and fruit, which are sent to Oran. It contains nothing of special interest.

8 kil. **Mers-el-Kebir**. Pop. 2250. A road, cut out of the solid rock for a great part of its length, connects this port with Oran.

2 kil. Underneath the road at this point is a curious cave, into which a boat can enter in smooth weather; it used to be frequented by seals, and is called *la Grotte des Veaux Marins*.

3 kil. from Oran is a small bathing establishment called **Les Bains de la Reine**, erected at the source of a warm mineral spring. It is so called after Isabella the Catholic, who in the 16th century brought her infant daughter to this place for the sake of these waters. The spring rises in a cavern or narrow cleft in the rock, about 20 feet in length by 10 feet in height. The temperature is about 85° Fahr., and the water contains large quantities of salt and magnesia. There are several separate baths, as well as the "Piscine," or bathing-place for the poorer classes. They are said to be efficacious in cases of rheumatism.

A short distance beyond the Bains de la Reine, the road crosses a ravine called the *Salto del Cavallo*, and farther passes the villages of *Saint André*, chiefly inhabited by fishermen and sailors; *Sainte Clotilde*, 200 inhab., principally occupied in the cultivation of vines; and *Saint Gerome*, an agricultural village. Beyond is **Mers-el-Kebir**.

The fort, said to occupy the site of

one built by the Romans, was taken by the Spaniards under Don Diego de Cordoba in 1505. Previous to this it had been one of the strongholds of the pirates who infested this coast, and were the terror of the neighbouring countries. In 1708 the Turks carried it by assault, and massacred the garrison to the number of 300. They in their turn had to surrender to the Count de Montemar in July 1732 after a sanguinary struggle, a few days after the fall of Oran. In 1791 the Turks, for the second time, became masters of Mers-el-Kebir; and at length, after various vicissitudes, it fell into the hands of the French. It occupies the extremity of the rocky promontory before described as forming a safe harbour in the most tempestuous weather. The fountain at the entrance is surmounted by the arms of Ferdinand of Arragon. It now contains the military convict establishment. On the extremity of the point is a lighthouse with a fixed white light, visible at a distance of 8 m.

A new fort, intended to command the harbour and existing fort, has been constructed on the summit of the hill above.

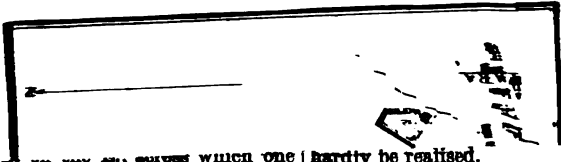
The *Village* is unimportant, but picturesquely situated on the western side of the fort.

Ain-et-Turk (pop. 738), 8 kil. beyond Mers-el-Kebir; the inhabitants are occupied in agriculture, and in raising cattle. Vines are grown to a considerable extent around this place.

Bou-Sfer (pop. 1527), 6 kil. from Ain-et-Turk, is another village on the margin of the plain "*des Andalouses*." As at Ain-et-Turk, agriculture gives employment to nearly all the population.

At 25 kil. E. of Oran is the Arab village of **Kristel**, under the Mountain of Lions, where there are some interesting caves. There is no carriage-road, but a mule-path, and one can go by a fishing-boat.

It has abundance of water.



... which one
sees the twin peaks of *Djebel Touniet*,
"Les deux Mamelles" (2931 feet).
After leaving the station the railway
ascends the mountain of *El-Kantour*
by a series of curves, following to a
great extent the old post road. The

hardly be realised.

A tunnel under *Djebel Meçid*, N.
of the city, is passed, and the station,
on a plateau at the foot of *Mansoura*,
is reached.

87 kil. Constantine. Pop. 46,133.

Capital of the province ; residence of general commanding, of préfet, bishop, and other high functionaries.

The remarkable situation of this city has pointed it out from the earliest times as an important fortress, and as one of the natural capitals of a country which has been the scene of perpetual wars and revolutions. Its ancient name was *Kerth* or *Cirta*, and it was the seat of the Massessylian kings, partaking of the fortune of its neighbour, Carthage.

Narva, whose wife was sister to Hannibal, was king in B.C. 230. He was succeeded by Syphax, who had obtained the hand of Sophonisba, daughter of Hasdrubal ; but Massinissa, king of the Massylians, who was also in love with her, took advantage of the breaking out of the Second Punic War to ally himself to Scipio Africanus, and by his help deposed Syphax, and obtained possession of Cirta and of Sophonisba, B.C. 202. Scipio having demanded her as a prisoner of the Roman senate, Massinissa sent her a dose of poison, which she instantly drank, merely remarking that she would have died with more honour had she not wedded at her funeral.

Massinissa reigned at Cirta until the breaking out of the Third Punic War, which his secret alliance with Rome had done much to foment ; and died B.C. 148, leaving his throne to his son Micipsa.

In his division of the kingdom, Micipsa left Cirta to his son Adherbal, who was besieged and killed there by Jugurtha, B.C. 112.

This was the commencement of the Jugurthine War, during the beginning of which the Numidian prince held his capital against the Romans, until in B.C. 109 Metullus and Marius took the command in Africa, and he was obliged to fly to more distant parts of his kingdom. The Romans then occupied Cirta, and from that stronghold carried on the war, until Jugurtha was betrayed to them, B.C. 106. The kingdom was shortly after given to Juba, who took the side of Pompey in his struggles with Julius Cæsar ; and in B.C. 49 was able to defeat a Roman army.

In B.C. 46, on the fall of the party of Pompey, after the death of Cato, Juba surrendered Cirta to the allies of Cæsar ; and after it had been much beautified and honoured with the name of "Cirta Julia," it remained the seat of a Roman colony until A.D. 304.

At that time Alexander, the Numidian peasant, raised a revolt against the Empire, and holding Cirta against the Romans, it was taken by them and destroyed after a siege ; but being once more restored in the year 313, it then changed its ancient name for that of Constantina.

Cirta was no less celebrated in ecclesiastical than in profane history. In 257 St. Cyprian was exiled here ; in 305 Secundus, primate of Numidia, caused a council to assemble within its walls to examine into the case of the *traitors*, or those who surrendered their church ornaments and sacred books during his persecution, and this assembly was the indirect cause of the Donatist schism. Sylvain, primate of Africa, held a second council here in 412, at which St. Augustine assisted. The acts were lost.

In the time of St. Augustine the bishop of this place was a Donatist ; and to this fact, as well as to its natural strength, it is perhaps owing that when Genseric and his Vandals overran the country, the city escaped destruction ; and Belisarius, after he had driven out the barbarians, found the Roman buildings still intact. Additional works seem to have been undertaken at this time, as the aqueduct, part of which still remains, is said to date from the time of Justinian.

Constantina was not, however, at any time as large and flourishing as Cirta had been, whose palmiest days were in the peaceful reign of Micipsa ; and now with the Arab invasion, in the middle of the 7th century, we come to its darkest period. It became a prey to the various Arab dynasties which disputed the government of the country ; and in successive sieges its ancient monuments were destroyed, although not effaced, as scattered Roman ruins covered the ground at the time of the French occupation, and

have only disappeared in consequence of their municipal improvements.

The city preserved its Latin name, and was at times the capital of the Arabs; but it seems to have been of little importance to them, and for a hundred years, until the end of the 15th century, governed itself as a Republic.

It was entirely fallen from its ancient grandeur when the Turks became masters of the country; but its inhabitants did not submit tamely to their rule; and after conquering and losing it several times, they built a fort adjoining the city in 1629, and in 1640 appointed a Bey for the province, who had his headquarters at Constantine.

Entirely subject to the Dey of Algiers, and called to give an account to him every four months, the government of those Beys was very insecure; and only one name among them especially stands forth, that of Salah Bey, who came into power about 1771, and was distinguished for his wise government for more than twenty years. To him are attributed most of the Mohammedan buildings, and especially the restoration of "El-Kantara," the bridge which brought the road and the aqueduct into the city.

This ambitious work raised suspicions in Algiers that he intended to make himself independent; and the Dey sent another governor to replace him, who besieged the place and forced Salah Bey to submit. He consented to come forth on condition that he might pass through the besiegers holding the burnous of one of the Arab chiefs, a recognised sign of safe-conduct; but no sooner had they reached the street than the Arab wrenched away his cloak, and Salah was surrounded by the soldiers and strangled.

To him succeeded a list of nearly twenty Beys in a little over thirty years, their short, stormy administrations being finished generally by the bow-string, poison, or the sword. But in 1826 there arose a rival to the Algerine power in Hadj-Ahmed, who, after the fall of Algiers, maintained himself independently in Constantine.

He led his troops against the French in 1830, and fought bravely at Algiers, retiring before the capitulation was signed. The French decreed his deposition in December of the same year, but quite ineffectually, as Ahmed took the title of Pasha, which was ratified by the Porte; and he retained the sovereignty of Constantine until 1837.

His reign was marked by cruelties and extortions of every kind; but his people rallied round him against the French, and made a desperate defence of their city. He was assisted in the government by a Kabyle named Bin-Aïssa, a man of low origin, but of great power; and during the French sieges Haj-Ahmed remained outside the town with his desert troops, while Bin-Aïssa took command within the walls.

The first French expedition against Constantine was made in November 1836, under Marshal Clauzel, an officer of great ability, but who, on this occasion, committed the grievous fault of underrating his enemy, and trusting too much to the assurance that had been made to him that no serious resistance would be offered.

The Marshal was accompanied by H. R. H. the Duc de Nemours, to whom was attached as A. D. C. a young captain of *Etat-Major*, afterwards Marshal de MacMahon. The commandant, subsequently General Youssef, who had rather prematurely been named Bey of Constantine, was also of the party. The army, consisting of 8776 men, left Bône on the 13th November and arrived before Constantine on the 21st, without having encountered any opposition, but much exhausted by fatigue and privation. The assault was made on the night of the 23rd by the bridge of El-Kantara, but was repulsed on all sides with frightful loss; and the Marshal, owing to the inclemency of the season, and the impossibility of revictualing his army, was compelled to retreat to Bône, where he arrived on the 1st of December, the whole army being in the last stage of exhaustion. The corps under his command was dissolved, and

the Marshal himself relieved of command, and recalled to Paris.

In the following year a second expedition was organised, consisting of 10,000 men, under command of the new Governor-General Darnémont. It was organised in four brigades, the first of which was commanded by the Duc de Nemours, and arrived before Constantine on the 6th of October 1837. Shortly after fire was opened General Darnémont was killed when examining the breach; the command was taken by General Valée, the commandant of artillery, and on the following day the assault took place. Great losses were sustained on both sides, and many of the inhabitants, in attempting to escape by means of cords into the ravines around, were dashed to pieces.

No traveller can fail to be deeply impressed by the magnificence of the situation of Constantine, whose grandeur and picturesque beauty are probably unsurpassed by that of any city in the world; and it can be truly said to deserve all the praise that has been so lavishly bestowed on it by writers on Algeria.

Nature seems to have constructed it entirely with a view to defence and picturesque effect. It occupies the summit of a plateau of rock, nearly quadrilateral in shape, the faces corresponding to the cardinal points, and its surface sloping from N. to S. Its sides rise perpendicularly nearly 1000 feet from the bed of the river Roummel,¹ which surrounds it on the N. and E., and it is connected on the W. side only by an isthmus with the mainland. The deep ravine, through which the Roummel flows, varies in breadth from about 200 feet on the S.E. side, to nearly double that distance opposite the Kasba; and is spanned on the N.E. by four natural

arches of rock, about 200 feet above the stream, one of which serves as the foundation for the bridge of *El-Kantara*.

On the N.W. side the precipices are the highest; and it is looking towards this point from the plain of the *Hamma* that the most splendid view of the city is obtained. To the N.E. and S.E. the heights of *Mansoura* and *Sidi Meçid* command the city. On the last-named hill stood a ruined koubba of the saint whose name it bears. The isthmus before mentioned connects Constantine with the hill of *Koudiat-Ati*.

The situation of Constantine, however, cannot be thoroughly appreciated unless a walk be taken round the outside of the city, and we would advise the traveller to postpone his exploration of the streets until this has been done.

We will suppose him to leave the city by the Place de la Brèche, where formerly stood the Porte Valée, occupying nearly the same place as the older Bab el-Oued. In front is the hill of Koudiat-Ati, where the French storming batteries were erected Oct. 1837. An attempt was made to cut this hill away, and with the *débris* to form a plateau which might become the site for a new faubourg, but the work has been suspended, and it will probably never be finished. Here is the corn-market, between the suburbs of St. Jean to the W. and St. Antoine to the E. In front of it are two squares planted with trees. That on the left is a garden, in the centre of which is a bronze statue of Marshal Valée; that to the right contains fragments of Roman antiquities—columns, capitals, inscriptions, too bulky to be placed in the Museum.

A path to the left, close under the wall, descends through a camp of Arabs, busily engaged in various trades, to the gate *Bab-el-Djabia* (Gate of the Reservoir), so called because in former days there was a reservoir here, fed by the aqueduct of Koudiat-Ati.

This used to be a curious Arab structure, built of Roman stones, but it and the adjacent wall has been

¹ The Roummel below Constantine becomes the *Oued el-Kebir*, the ancient *Amsaga* or *Ampagas* which formed the boundary between the kingdoms of the *Masseylians* to the W. and the *Maassylians* to the E. At the sources of the *Bou Merzoug*, one of its affluents S. of Constantine, M. Cherbonneau found an inscription containing the words *CAPVT AMSAGÆ*.

reconstructed. The inner face of the gate is, however, retained. The left side of the arch rests on a *cippus* bearing a Latin inscription, and below it another containing one in Greek and Latin, as follows :—

Π 'ΙΟΥΛΙΩΙ 'ΓΕΜΙΝΙΩΙ
 ΜΑΡΚΙΑΝΩΙ 'ΠΡΕCΒΕΥΘΙ '
 CΕΒΑCΤΩΝ 'ΑΝΤΙCΤΡΑΘΗΩΙ
 ΥΠΑΤΩΙ 'ΑΔΡΗΝΩΝ 'ΠΟΛΙC 'Η
 ΘΗC 'ΑΡΑΒΙΑC 'ΔΙΑ 'ΔΑΜΑCΕΟΥC
 ΚΟΙΛΑΦΟΥ 'ΠΡΕCΒΕΥΘΗC '
 +
 ΑΔΡΑΗΝΩΝ 'ΕΠΙΑΡΧΕΙΑC
 ΑΡΑΒΙΑC
 TRANSLATA AB VRBE SECVN
 DVM VOLVNTATEM MARCIA
 NI TESTAMENTO SIGNIFICAT
 D D

The translation of the Greek inscription is as follows :—

“To Publius Julius Geminus Marcianus, chief officer of the Augustan (legionaries), praepositor, (pro)-consul, the township of the Adreni of Arabia (erected this memorial) by the hands of Damases Koilaphas, (as being) chief of the Adraeni in the province of Arabia.”

Another inscription mentioning the same offices is let into the wall of the Kasba (*q. v.*)

A steep path descends from the gate to the Roummel, passing by some masses of Roman rubble, of which the use has now been forgotten. Roman masonry is seen at intervals in the city walls. There was once a gate here, *Bab-Heninecha* (Gate of the Tunnel), so called because it opened a covered way leading down to the river, so that the inhabitants might get water without danger from assailants. On the left bank of the Roummel, close to the cliff, is the *slaughter-house*; a little higher up, on the same side, the *Bardo*, a large ugly building formerly used as barracks for the Turkish cavalry, and now for the Spahis. About a mile higher up the stream, on the Oued

Merzoug, just above its junction with the Roummel, are the remains of the Roman aqueduct which spanned the valley between Djebel Guerioum and Koudiat-Ati. Five arches remain, about 60 feet high. They are built of huge blocks of limestone without mortar; and to ensure additional security, the bases of the piers are considerably broader than the piers themselves, narrowing gradually as they ascend. There is a tradition that the aqueduct was constructed by Justinian.

Returning to the *Abattoir*, a bridge crosses the Roummel under the rock called *Sidi Rached*, the most southern point of the cliff on which Constantine is built. It is said that the Turks used to throw suspected or faithless wives from the top of this rock. Here is the beginning of the grand gorge which extends round the E. and S. sides of the city. The cliffs are scarcely more than 15 feet apart in this place.

After crossing the bridge a short tunnel is traversed, and a warm spring reached. The water is collected into cisterns and used for washing. A few yards farther on, beyond a quarry, is the place assigned by tradition to the martyrdom of SS. Marius and Jacobus, who perished here in A. D. 289. The inscription recording the event is rudely carved on the face of the rock, and was apparently the composition of an illiterate person; but it has been so much damaged by time and neglect that it will soon be quite illegible. It ran as follows :—

† IIII . NON SEPT . PASSIONE MARTYR
 ORVM HORTENSIVM MARIANI ET
 IACOBI ΔΑΤΙ ΙΑΠΙΝΡVSTICI CΡΙCΠΙ
 ΤΑΤ † ΜΕΛΤVΝΙ ΒΙCΤΟΡ Ι ΣΙΛΒΑΝΙ ΕΓΙΠ
 ΤΗΙ ΣCΙ ΔΙ ΜΕΜΟΡΑΜΙΝΙ ΙΝ CΟΝCΠΕCΤV ΔΝΙ
 CΥΟΡVΜ ΝΟΜΙΝΑ ΣCΙΤΙC QVI FECIT ΙΝ ΔXV.

†

This has been thought to mean—

“Quarto nonas Septembres passione martyriorum hortensium Mariani et Jacobi, Dati, Japini, Rustici, Crispi, Tati, Meltuni, Victoris, Silvani, Egiptii, Sancti diei (?). Memoramini in conspectu Domini. Quorum nomina scitis qui fecit indictione quinta decima.”

Hence the path ascends to the hill *Mansoura*, whence a most interesting view is obtained of the Arab quarter and its tanneries, which are built in the most perilous positions, on the very edge of the precipice. The steep cliffs afford nesting places to numbers of pigeons, hawks, and falcons; while storks build upon the housetops. Remains of two Roman bridges are to be seen low down in the ravine. They probably afforded a means of access to the suburb which undoubtedly covered the plateau of *Mansoura* at that time. A splendid *Triumphal Arch* was still standing here in 1724; it perhaps formed a part of the decorations of the *Hippodrome*, whose remains were discovered and destroyed when the railway station was built. Shaw, who saw it in the year above mentioned, says: "Among the ruins to the S.W. of the bridge we have the greatest part of a triumphal arch called *Cassir Goulah*, or the *Castle* (as they interpret it) of the *Giant*, consisting of three arches, the middlemost whereof, as usual, is the most spacious. All the mouldings and friezes are curiously embellished with the figures of flowers, battle-axes, and other ornaments. The Corinthian pilasters erected on each side of the grand arch are panelled like the gates of the city, in a style and fashion peculiar to *Cirta*."

The barracks on the summit of *Mansoura* are occupied by the *Chasseurs d'Afrique*; lower down, just above the railway station, is the *Ecole Normale*.

At the N.E. angle of the city was the bridge of *El-Kantara*. It would appear from the Arab chronicles that the other bridges were destroyed in 1304, when *Bin-el-Emir*, Kaid of *Constantine*, revolted against the *Emir Khaled*. Enough remains of the Roman works at *El-Kantara* to merit a detailed description.

Advantage has been taken of one of the natural arches over the *Roummel* for the foundation of the bridge. Looking at the ruin from the S. side, it will be seen that there were originally three piers, of nearly the same size, and equidistant.

Between the first and second of these, counting from the E., a perfect arch remains. It was double, with a considerable space between the vaults, of which the upper one, built of massive blocks, carried the roadway; the lower one, carefully finished, was merely ornamental. This was evidently the only arch beneath which water passed, as the stream must always have been scanty, and the rocks have no appearance of being waterworn elsewhere. The interval between the second and third piers is walled up. This would seem to have been done nearly at the time of the original construction, for the stones are precisely the same as those used in the piers, and worked in the same way; but the lines of masonry do not exactly correspond. Between the third pier and the rocks there was a half arch, which apparently was filled in like the others, though on the S. side the wall has fallen away completely. A similar half-arch appears to have existed between the first pier and the rocks; but these abut on the pier so closely that it is not easy to make out the construction in this part. Here may still be seen the bas-relief so quaintly but fantastically described and figured by Shaw "of a lady treading upon two elephants, with a large scallop shell for her canopy. The elephants having their faces turned towards each other, twist their trunks together, and the lady, who appears dressed in her hair, with a close-bodied garment, like the riding-habit of our times, raiseth up her petticoats with her right hand, and looks scornfully upon the city." It is immediately below the central pier of the aqueduct which passes under the bridge, and is best seen from the *Chemin des Touristes*.

This system of piers and arches supports a level roadway; above which was a second stage, consisting, it is said, of six arches. The height of the whole structure was nearly 220 feet above the soil on which its foundations rested, which are themselves 184 feet above the river; so that the whole was not less than 404 feet in height.

An excellent description of this arch has been left by El-Bekri, the Arab geographer of the 11th century, who says: "This bridge is of a remarkable structure, its height above the level of the water being about 100 cubits; it is one of the remains of Roman architecture; it is composed of five upper and lower arches which span the valley. Three of these, namely, those to the W., have two stories, as we have said; they are intended for the passage of water, while the upper ones form a communication between the two sides of the ravine. Regarding the others, they abut against the mountain. These arches are supported by piers, which break the violence of the torrent, and are pierced at their summit by small openings. When there are extraordinary floods, which sometimes take place, the water which rises above the top of the piers escapes by means of these orifices. This is, we repeat, one of the most remarkable buildings ever seen."

Peyssonnel, who visited it in 1724, describes it as "a very fine structure, with three rows of arcades, and a height of about 250 feet, but rather narrow, having fallen."

Shaw saw it in 1740; he says it was "indeed a masterpiece of its kind, the gallery and the columns of the arches being adorned with cornices and festoons, ox-heads and garlands. The keystones also of the arches are charged with caducei and other figures."

Bruce also visited it in 1765, and has left two drawings of its actual condition at that period.¹

Subsequently it was thoroughly restored by Don Bartolommeo, an architect of Menorca, in 1793, during the reign of Salah Bey, with materials chiefly obtained from the destruction of other Roman edifices. It stood as he left it till 7 A.M. on 18th March 1857, when the pier of the upper stage nearest to the town suddenly gave way, with the two arches resting upon it. It was found impossible to restore it; the bridge was in consequence battered down with heavy artillery on the 30th

of the same month. The substantial modern iron structure was built in 1863; the aqueduct beneath it in 1857.

It was this bridge and gate which were attacked by the French in 1836, under General Clauzel, when they made their first disastrous attempt upon Constantine.

From the E. end of the bridge there is a beautiful view W. through the ravine; at the beginning of which may be seen the remains of the road that afforded access to the city after the destruction of the old bridge. It descended close under Djebel Meçid; then crossed the ravine, and reached the gate close to the W. end of the bridge.

The traveller may here make a digression and ascend Djebel Meçid, to the Civil Hospital, originally intended for an Arab college, passing on the right the Jewish cemetery; a magnificent view is obtained from the top of the hill if he cares to mount so high.

Descending to the bridge he may continue his walk along the **Corniche Road**, on the right bank of the Roumel, from which superb views are obtained of the ravine, the natural bridges of rock, the cliff on which the Kasba stands, and of the rich plain of the Hamma and the corn-lands beyond, with high mountains in the distance.

Shortly after emerging from the last tunnel a path to the left conducts to the baths of **Sidi Meçid**, much frequented by both Arabs and French. They are situated in a luxuriant garden. There is one immense semi-circular piscine built by the men of the 63rd Regiment, two smaller ones, and three private bathing-places in the sides of the rock, shut in by doors. The water is beautifully clear, and has a temperature of 86° Fahr. Numerous Roman inscriptions have been found in the vicinity, showing that it was a common custom to have country-houses and gardens here. One has often been quoted and is exceptionally interesting, but the traveller will generally be content to take it for granted. The writer visited it in 1895, not without

¹ *Footsteps of Bruce*, p. 49, Pl. IV.

difficulty; it is in a property called *Bekira*, belonging to a lady of the name of *Daikha*, a grand-daughter of Ahmed Bey, at a distance of about a kilomètre from the Railway Maisonnette, No. 42, about 4 kilomètres from Constantine, and can best be reached from the Corniche roads.

There are two tablets carved on the rock, on one of which the letter D only is now legible, the other has the inscription entirely obliterated. About half a kilomètre farther on is a large block of stone, with the following inscription rudely engraved but quite legible:—

LIMIS FVNDI SALLVSTIANI.

Did this actually indicate the limit of the property of Sallust, the great historian and proconsul, where he was wont to come in his hours of leisure to combine the charms of philosophy with the more material pleasures of this life? He had abundant means of acquiring property during his proconsulate, and his magnificent house on the Quirinal was enriched with the plunder of Hippo, Kalama, Tagaste, and Cirta.

From the baths of Sidi Meçid a path winds under the cliff, and comes suddenly upon the bed of the Roummel, at a point where the river falls over several ledges of rock in a series of picturesque cascades. Opposite is the perpendicular cliff of the Kasba—the Tarpeian rock of the Turkish city—500 feet above the river. It was over this cliff that upwards of 300 of the inhabitants let themselves down by ropes, to escape the French. Most of them perished miserably. The stream can here be crossed dryshod, when not swollen by rains. A path up its left bank, close to the race that carries water to the flour mills, should be followed for a short distance, for the sake of the view of the natural ridges.

Returning to the mouth of the gorge, a good road winds past the Moulin Lavie, and up the hill to the Place Valée. On the left, close under the cliff, used to be a very interesting monument, now most wantonly destroyed in the attempt to level Coudiat

Ati. It was the Tomb of the Silver-smith *Præcilius*, who died at the age of more than 100 years. As this has been so often described, we only give a translation of the inscription by Mr. Alexander Graham:—

“Here silently I lie, describing my life in verse. I have enjoyed a good reputation and the greatest of prosperity. *Præcilius* is my name, a native of Cirta, following the art of a goldsmith. My honesty was extraordinary, and I always stuck to the truth. I was courteous to every one, and never refused to sympathise with others. I was merry and always enjoyed pleasure with my dear friends. After the death of the virtuous Lady Valeria I found life different. As long as I could, I passed an agreeable and holy life. I have become celebrated 100 happy birthdays. But the last day came when I must throw off this mortal coil. While I was alive I made preparation for my death. Fortune, which has smiled upon me, never deserted me one single instant. May she accompany you through life, and may you arrive at the same state as myself. Here I await you. Come!”

This walk finished, the traveller should return to the bridge and go through the *Chemin des Touristes*. No rhapsodies are too exaggerated to describe its beauties. Until recently the space between the bridge and the Corniche road was so covered with filth and rank vegetation that it was quite impossible to enter it or to explore the interesting architecture of the Roman bridge. Lately, a public-spirited citizen of the name of *Rémès* has laid out all this space in grassy slopes and pathways, and above all, has constructed a road in the face of the cliff on the right bank of the river which extends from the bridge to the martyr's inscription, whence it mounts the hill and leads on to the road conducting to the railway station. The traveller can now examine closely the elephants which Shaw has so fantastically described, the remains of the bridge, the ruins of the two other bridges which spanned the ravine, and he will pass from one view to another, such as cannot be described.

The small charge of 2 f. will be gladly and thankfully paid by every tourist who uses it.

The traveller would now do well to hire a carriage and explore the environs. Leaving always by the

Place Valée, he should descend to the garden of the *Poudrerie*, an order to see which will be readily granted by the officer commanding the artillery in the Kasba. From this place the best view of the cascade of the Roummel is obtained, and this is perhaps the finest of all the views around Constantine.

Regaining the main road, and following it nearly as far as the Pont d'Aumale, the traveller should take the road to El-Mila, which passes over a smaller iron bridge to the left, and mounts the hills on the left bank of the river. The view looking back to Constantine, with the fertile valley of the Roummel in the foreground, brilliant with every shade of green, is exquisite. $2\frac{1}{2}$ kil. from the junction of the roads is the small oasis of *Salah Bey*.

Even in the times of the Romans this was a favourite summer residence of the inhabitants, and some traces of their villas are still visible amongst the cornfields.

Towards the close of last century *Salah Bey* conceived the idea of building a palace here. He repaired the cistern containing one of the hot springs which irrigate the place, planted trees, and commenced to build a house. Unfortunately he incurred the displeasure of the populace by decapitating a much venerated saint, *Si-Mohammed*, who attempted to overturn his authority.

M. Cherbonneau relates the legend that the body of the saint was transformed into a crow, which, after much sorrowful croaking, flew at once to the country palace, which it cursed, and then disappeared. The Bey, frightened at the curse, erected a koubba to the memory of the marabout, which he called *Sidi Mohammed el-Ghorab*, signifying "My Lord Mohammed, the Crow."

This koubba still exists, and in an adjacent building are the tombs of some of *Saleh Bey's* family, but the palace was despoiled by *Ahmed Bey*, and all its ornamental work carried off for the construction of his palace in Constantine.

The traveller should now return to

the Place Valée whence he set out; but instead of entering the city he should turn off to the right, descend the hill past the Government Forage Park, cross the Roummel by an iron bridge, visit the *Pepinière* a little beyond, advance still farther, and, turning to the left, cross the wide sterile plateau of *Mansoura*, on the top of which is a fortified position containing the cavalry barracks. The view of the city from this point is particularly fine. It is pleasant to observe how successfully this barren hill has been laid out with Aleppo pines; the writer saw it before a single tree was planted and now it affords a delightfully shady retreat for the inhabitants of the city. The road now descends the hill of *Mansoura*, and, crossing behind the railway station, enters the city by the bridge of *El-Kantara*.

From *Mansoura* a good view is obtained of the highest peak of *Djebel Mejid*, which commands the city, and which, on that account, has been occupied by a defensive work. The ruins of a Roman fort were found on excavating the foundations; it had three distinct *enceintes*, but no cisterns were discovered.

Constantine itself hardly bears out the expectations which will be formed of it when seen from a distance. The town is, as usual in Algeria, a mixture, partly Arab and partly French; and hardly any traces now remain of the splendid city of *Cirta*, of which it is the successor.

The Arab quarter is quite as curious as that of *Algiers*; and appears to have been left even more thoroughly unchanged, though becoming every year more circumscribed in extent by French improvements.

The north margin of the plateau is lined by the *Boulevards*, excepting at the northern corner, which is occupied by the Kasba.

Near this point has been erected a new Prefecture, from which there is a very extensive view of the plain below.

The lower part of the town is still entirely native, but it is contemplated soon to drive a wide European street through the centre of it. The

Janissaries' barracks, near the Hôtel d'Orient, were demolished in 1874, and a covered market and theatre have been erected on the site.

The *Place du Palais*, bordered by rows of acacia-trees, is the most important of all the Places; and in it is the church of Nôtre Dame, the Cercle Militaire, and the best cafés; while its N. side is formed by the palace of Ahmed Bey, from which it takes its name.

The *Place Négrier*, at the northern end of the Rue de France, is named after General Négrier, who was at one time commandant of the province. It is triangular in form, is planted with trees, has a fountain in the centre, and is bounded on the N.W. side by the mosque of Salah Bey.

The *Place des Galettes*, or *Rahbet es-Souf* (the hall of wool), between the Rue Combes and the Rue Vieux, is occupied by a vegetable market, and being in the native quarter is exceedingly picturesque.

Churches and Mosques.—The **Cathedral** of *Nôtre Dame des Sept Douleurs*, in the Place du Palais, formerly the mosque of *Souk-el-Ghazel*, was built by the Bey Keliane Houssein, usually called *Bou Kenia*; the family of Jelloul propagated the tradition that it had been built by their ancestor El-Haj Abbas bin Jelloul in 1730. A dedicatory inscription, however, proves the contrary. The ancient "mimbar" or pulpit, which is richly ornamented, still remains, as do also some gems of Moorish ornamentation in coloured plaster and ancient tiles which decorated the original mosque; but the aspect of the whole is mixed and incongruous, and the frescoes in the sacrarium are hideous.

The **Jamâa el-Kebir**, or *Grand Mosque*, in the Rue Nationale, is built on the ruins of a Roman temple, which, according to M. Cherbonneau, was formerly a pantheon, as two inscriptions, one to the Goddess of Concord and another to Venus, have been dis-

covered. On a pedestal, which formerly supported a statue, close to the minaret, there was an inscription in Latin, recording the name of the Roman Quæstor who erected it; and near the western gallery one in Arabic to commemorate the death of Mohammed Ibrahim, which took place in the year 1221.

This mosque formerly stood in the Place Betha, but the construction of the Rue Nationale caused that square to disappear, together with the minaret and part of the court of the mosque. A new façade has been built in the street; above the door is an Arabic inscription in honour of Napoleon III., which did not share the fate of similar inscriptions at the revolution.

Jamâa Sidi el-Kettani, known as the mosque of Salah Bey, in the Place Négrier, of which it forms the western side, is the finest of all the mosques of Constantine. It was erected by Salah Bey, who also built the adjoining *Medresa*, or Ecclesiastical College, and the *Harem*.

This mosque is entered by a large, arched, iron-bound door, beyond which is a flight of marble steps, partly black and partly white, leading into a marble-paved court, around which runs a circular gallery, and the interior is entered from this court by two carved doors. It is of a rectangular shape, and divided into naves by columns of white marble. The ceiling is of red and green planks placed alternately, on which are painted various designs. The whole is surmounted by two cupolas. The "mihrab," corresponding to the Christian sacrarium, is a recess, the roof of which is supported by four columns, and decorated with arabesques; and the walls are covered with variously-coloured tiles. The "mimbar," or pulpit, is beautifully ornamented with marble, agate, and other kinds of stone; it was brought from Italy. The façade and the minaret of this mosque were reconstructed by the same architect who patched up the Grand Mosque.

At the end of the Court of the Medresa are the *Tombs* of Salah Bey

and his family, surrounded by a railing, and surmounted by a dome.

The *Harem* of Salah Bey, near the Medresa, is now converted into a school.

Jamâa Sidi el-Akhdar, in the Rue Combes, which is used by the Hanefi sect, is decorated internally, something in the same manner as that last described, but in worse taste. The tombstones in the place of burial bear the names of many celebrated personages. The *minaret*, nearly 80 feet in height, is of great beauty. It is of octagonal shape with a projecting covered gallery round the top. The tombs in the little court are those of the Bey Hassein, usually called *Bou Hanek* and his family.

There are several other mosques in the city; but those above described are the best worth inspecting.

The *Tomb* of a famous saint of Morocco, which is constructed partly out of Roman remains, is in the Rue Combes. Entrance is obtained by means of some stone steps, leading to a vine-covered terrace, on to which the tomb opens.

The **Palace of Constantine** is an interesting building; it is by no means venerable in point of age, being the work of El-Haj Ahmed, the last Bey, but it is an excellent type of Moorish architecture, and it is constructed out of materials of a much older date.

At the farther end of the Place du Palais is seen a heavy and inelegant mass of masonry, the appearance of which is by no means improved by being pierced with several modern doors and windows, but on passing the principal entrance this impression is instantly dispelled. The central space is occupied by a garden, round which are cloistered walks and porticoes giving entrance to the various apartments.

The site used to be a mass of filthy lanes and crumbling houses. In 1826 El-Haj Ahmed was named Bey, and he immediately conceived the idea of building a palace worthy of the rulers

of Constantine. He commenced, by fair means or foul, to obtain possession of the ground necessary for his purpose.

A Genoese of the name of Schiaffino, engaged in the exportation of grain at Bône, was charged to procure from Italy the marble necessary for the work, which was laboriously brought, ready sculptured, on mules from the coast. Complaints of his extortion to the Dey of Algiers caused the work to be suspended for a time; but in 1830, becoming, by the fall of the Dey, absolute master of the province, he resumed it with renewed vigour. He collected his workmen; without the least scruple he commenced to demolish the houses which stood in his way; all the principal mansions of Constantine were despoiled of their choicest works of art, old encaustic tiles, marble columns, carved wood-work; the summer palace of Salah Bey was entirely destroyed in this manner. And so the palace, which under ordinary circumstances would have been the work of generations, rose as if by enchantment in the short space of six years. It is of an oblong shape, with an area of 5609 square metres. It contains three principal buildings of two stories, consisting of numerous small rooms opening into wide galleries supported by columns.

Between two gardens is the Bey's pavilion, now the private office of the general, joined to the rest of the building by a cloister supported by a triple range of columns. Throughout the whole building the different styles of these pillars indicate the diversity of sources from which they were obtained; some are slender and elegant, others heavy and massive, with every variety of form, round, square, octagonal, and twisted; their capitals are equally heterogeneous, but the effect of all, surmounted by the elegant Moorish arch, is good, though marred by the dead black colour of the arches and the ungainly draperies depicted above them.

The main walls for a height of several feet are covered with beautiful old tiles, while above them are ridiculous frescoes representing flowers,

fruit, grotesque views of cities, forts, and vessels, said to be the work of Christian prisoners.

In some of the upper rooms are most exquisite specimens of Arab carpentry in old oak and cedar.

In the corridor is a fine statue supposed to be of the mother of Caracalla, the only *perfect* one ever found in Algeria.

Space does not admit a detailed description of this palace; the visitor will be shown the chamber where the Emperor slept, the hall of arms, trophies of the various campaigns made in the province, the Bey's throne, and other interesting objects; but nothing will please him more than a walk round the lower cloisters which surround the gardens.

The palace is now the residence of the general commanding the division, and contains various public offices connected with his command, such as the direction of Engineers, Artillery, etc.

The **Kasba**, or Citadel, at the N. corner of the town, has been entirely modernised by the French, who have built in it three separate *Barracks*, capable of containing together 3000 men; exceedingly comfortable, no doubt, for the soldiers, but a blot in the magnificence of the landscape. The original building was probably the Roman capitol. The cisterns also were of Roman construction; they are of great extent, and were discovered while making the necessary excavations for the new works. Shaw says that in his time they were twenty in number, having an area of 50 yards square. The large Roman magazine for storing corn has been discovered more recently. The French have erected within the walls a fine *Hospital* for 1500 persons, which is nursed by the Sisters of St. Vincent de Paul. At the time of the French siege the Kasba was the last stronghold of the Arabs, who there made a desperate defence against General Rulhières; and finally, sooner than fall into the hands of the invaders, hundreds of the besieged—men, women, and children—attempted to lower themselves

into the gorge by means of ropes. Through being overloaded many of these broke; and the bed of the ravine soon presented a frightful spectacle of heaps of mangled bodies of the dead and dying.

Numerous Roman remains have been discovered at this spot; and the walls of the Kasba are decorated with many inscriptions which have been let into them, both inside and out. One of these, on a split stone, mentions the same officer to whom the stone at the Bab el-Djabia was dedicated. It runs:—

Π<ΙΟΥΛΙΟΝ<Ν<ΙΕΜΙΝΙΟΝ
 ΜΑΡΚ<ΙΑ<ΝΟΝ<Ι
 ΠΡΕΣΒΥΤΗ<Ν<ΣΕΒΑΣ<Τ
 ΤΩΝ<ΑΝΤΙ<ΕΤ<ΡΑΤΗΓΟΝ
 ΥΠΑΤΟΝ<Η<Ι<ΡΥΛΗ<ΚΑΙΟ
 ΔΗΜΟΣ<ΑΡΗ<ΝΩΝ<ΠΕΤΡΑ
 ΩΝ<ΜΗΤΡΟΠ<Ο<ΛΕΩΣ<ΤΗΣ<Α
 ΡΑΒΙΑΣ<Α<Ι<ΑΥΔΙΟΥ<ΑΙΝΕ
 ΟΥ<ΠΡΕΣΒΥΤΟΥ<ΕΥΕΡΓΕΤΗ<Ι<
 ΘΕΝΤΕΣ<Υ<ΑΥΤΟΥ<ΑΝΕΘΕ
 Ε<Ι<Ν<Ι

It appears to commemorate a statue raised to Marcianus by the district that had benefited by his rule.

The officers and soldiers who fell in the sieges of 1836-37 are buried within the fort, under a monument recording their names, which include those of Generals Damrémont, Perrégaux, Combes, Vieux, and Serigny.

The traveller should not fail to visit the **Garden of the Artillery**, in the Kasba, from which a magnificent view, looking down into the ravine of the Roummel, is obtained.

The **Palais de Justice**, in the Rue Potier, is a rather handsome building.

The **Museum** is in one of the rooms of the Mairie. It contains a collection of antiquities, some of which are exceedingly interesting, especially a bronze statuette of the winged figure of *Victory*, which was discovered beneath the Kasba, and presented to the Museum by Col. Ribot. This is one

of the most exquisite objects of art ever found in Algeria. The collection of African medals also is good. A model of the Medrassen is deposited there. Opposite the public garden is a collection of larger objects, such as statues, columns, tombstones, friezes, etc. It is curious to remark that the monumental inscriptions appear to indicate that the inhabitants of Constantine were celebrated for longevity, many of them exceeding the age of 100 years! M. Cherbonneau gives a list of 15 tombstones observed by him at Constantine recording ages from 100 to 131 years.

There are very remarkable subterranean passages under the city, the entrances to which are now bricked up. An eye-witness thus describes them:—"In 1858, visiting in company with my learned friend, M. Cherbonneau, the courtyard of Ben Zaghbib's house, now occupied by Dr. V—, we were shown a gate, by which we descended into a subterranean passage, high, spacious, and solidly built, like that in the Tombeau de la Chrétienne. Here the inhabitants took refuge during the siege of Constantine by the French in 1837. We dared not penetrate far, as there was a perfect labyrinth of passages, blocked up by square stones, earth, and the filth of ages. But what we saw sufficiently confirmed the native tradition that Constantine is built on vaults, intended not merely to sustain the superstructure, but probably to serve as storehouses for provisions, material of war, etc., and that one can walk all round the city underground. The insular position of the city, which rendered all extension of its area impossible, may have caused the construction of these underground passages and vaults as storehouses in time of peace, and places of refuge during sieges.

"We saw another door leading into them a few steps in front of the great mosque, but the Arabs declare that there are two principal orifices besides, one in the Kasba, and one near the Porte de la Brèche."

Water is supplied to Constantine by

means of an aqueduct, which brings a copious stream from Ain-Fesghia, 60 kil. on the road to Batna, into the city. The Roman cisterns, containing 12,000 cubic mètres, have been repaired, and are supplied from *Djebel Ouache*, by another aqueduct which crosses the ravine by the bridge El-Kantara. This supply is now used only for the Kasba, and as a reserve in case of drought or siege.

The *Stone Pyramid*, erected to commemorate the death of Governor-General Comte de Damrémont, stands outside the city, near the junction of the roads from Setif and Batna. An inscription in French records his death, which took place on 12th October 1837, while visiting the batteries. The same inscription in Arabic is on the S. side of the pyramid. He was killed by a bullet almost at the same time that General Perrégaux was mortally wounded. Constantine was taken by assault on the following day, General Valée having assumed the chief command.

Markets and Manufactures.—There are several large markets at Constantine, among which may be mentioned the corn market, held outside the Place Valée, which is the most important in Algeria. The vegetable, fruit, and fish market is next to the Hôtel d'Orient.

The chief manufactures of Constantine are leather goods, such as shoes, saddles, and harness, and articles of embroidered leather, some of which are of great beauty, and woollen fabrics, especially *Haïks* and *Burnouses*. It is estimated that nearly 100,000 of these garments are woven yearly in Constantine. The finest and most expensive kind, called *Gandouras*, are made partly of wool and partly of silk, and are beautifully soft and fine. *Tiellis*, or tent cloth, is also extensively woven. The chief commerce is in cereals and wool.

EXCURSIONS IN THE NEIGHBOURHOOD.

Bou Merzoug. Θ—An interesting expedition to the student of prehistoric remains is to the source of the *Bou*

Merzoug, which formerly supplied Constantine with water. Here, over an immense extent of hill and valley, not less than 12 kil. in length, are found almost every known type of megalithic monuments. These were first explored by Mr. Christy and M. Féraud in 1863, who examined more than a thousand during the three days of their stay there. This fountain is the only known habitat of a curious little fish, the *Tellia apoda* (see p. 74).

Djebel Ouache.—A pleasant drive of 6 kil. is to *Djebel Ouache*, more correctly *Jebel el-Wahash* (the mountain of wild beasts). Here are situated the reservoirs constructed for supplying Constantine with water, and on which it was dependent before those of Ain-Fesghah were conveyed to the town. The basins are now used principally for the supply of the Kasba, and the plateau of Mansoura. Beautiful plantations have been made here, and what will particularly interest the traveller, a considerable number of the rare African pinsapos (see p. 119), growing side by side with the better known variety of Spain.

Es-Soumah and Mahadjiba. Θ—This excursion is best made on horseback, in two days, spending the night at the village of El-Aria, but there is a good carriage-road all the way. The travellers will have to diverge a little from the high road to reach the Roman ruins described.

Es-Soumah may easily be reached on foot from Le-Kroub, a station on the railway, which is only 3 kil. from it. It is called by the Arabs Es-Soumah, the minaret, a term which they habitually employ to designate any ancient mausoleum or tower-like monument. Europeans generally, but erroneously, call it the "Tomb of Constantine."

The ruins of this once beautiful edifice, the history of which is quite unknown, are in the purest Doric style, and probably date from the 1st century. It is built on a mound near the eastern boundary of the territory of Cirta, as has been proved by the discovery of a tone bearing the inscription A.P.C.

(*ager publicus Cirtensium*), and close to the high road between that city and Kalama on the one hand and Lambessa on the other. Its object was either to serve as the mausoleum of some distinguished person, or to commemorate a great victory.

The building, as it now exists, is composed of three principal parts, a square base, of nearly 3 mètres high, surmounted by three gradients, each 0·54 mètre in height. Above these gradients rises a plinth of 1·10 mètre, crowned by a splendid cornice, of a bold and firm, yet refined character, measuring 0·76 mètre in height. At this level a course of stones 0·54 mètre high, retired from the cornice by 0·30 mètre on all sides, extends like a pavement over the upper surface of the monument, and serves as a footing to four square pillars that occupy each angle, leaving a distance outside of nearly a yard on the two exterior faces. The courses of stone in the pillars are 0·61 mètre high, and 1·74 mètre on each side. Prominent round bucklers decorate the outward faces of each of these pillars.

Unfortunately at this point the monument has been thrown to the ground, and it is amongst the ruins that a search must be made for the completion and restoration of the buildings. No doubt earthquakes contributed greatly to its destruction, but there is abundant evidence that the hand of man was not foreign to the work. Part of the material is scattered in every direction, but it is principally on the N. side that it lies heaped up to the level of the floor.

About 10 m. farther, on the old road between Constantine and Guelma, are the ruins of **Mahadjiba**, Θ, or Kasr-el-Mahdjouba, the *Castle of the Female Recluse*, and the *Seniore of the Itinerary of Antoninus*.

The position of this city or stronghold was admirably chosen from a strategic point of view, being built on an isolated hill, the top of which is a rough triangle rising abruptly from the plain, and sloping backwards towards its base in a series of terraces.

In front of it is an extensive stretch of rich corn and pasture land, reaching as far as Constantine, while behind it on the south is a narrow pass in the Fedj-bou-Ghareb, a remarkable scarped hill of compact limestone, giving access to the plain of the Amer Cheraga and Oued Zenati, in which are situated 83,000 out of the 100,000 hectares of land so lavishly granted to the Société Générale Algérienne by the late Emperor.

Thus this position completely commanded the ancient highway between Cirta and Kalama, as it now commands the Arab road between Constantine and Guelma.

The whole hill is covered with the remains of buildings constructed of huge blocks of cut stone; some of the walls are entire to above the level of the first floor, the holes for the reception of the joists being distinctly visible. The principal and best preserved edifice is the tower, from which the ruins derive their Arab name, an elegant and massive building, which perhaps formed the citadel of the place. At the base of the hill below the citadel is an arch of cut stone, giving access to a subterranean passage, whence flowed a stream of water. This is now choked up, and the water has forced itself a passage through the *débris* about a hundred yards farther down, where it has created a little oasis of trees, the only ones as far as the eye can reach.

On the opposite side of the valley is El-Aria, a village founded in 1875, where the traveller will be able to find accommodation for the night, and he can return to Constantine on the following morning either by the high road or by a shorter bridle-path over the hills.

El-Kheneg. Θ—A very interesting excursion, which, however, must be done on horseback, is to the ruins of *El-Kheneg*, erroneously called by the Arabs *Kosentina-Kedima*, or old Constantine,—in reality the ancient Roman *Respublica Tidditanorum*. It is situated about 23 kil. N. W. of Constantine, on the same river which flows past the capital, and the general char-

[Algeria]

acter of the ground on which the two cities are situated is very similar. There are very well-preserved remains of a Roman road, a Roman citadel restored by the Byzantines, many other ruins of the same character, and numerous dolmens. About 4 kil. E. of it, and the same distance from the confluence of the Oued Smendou and the Oued El-Kebir, by which name the Roummel is here called, is the **Tomb of Lollius**. It is of a cylindrical shape, 20·30 mètres in diameter and 5·50 mètres high, raised on a base. It appears to have been a cenotaph raised by Marcus Lollius to five members of his family. It bore the following inscription:—

M . LOLLIO . SENECTIONI . PATRI
GRANIAE . HONORATAE . MATRI
L . LOLLIO . SENECTIONI . FRATRI
M . LOLLIO . HONORATO . FRATRI
P . GRANIO . PAVLO . AVONCVLO
Q . LOLLIVS . VERBIVS . PRAEF . VERBIS .

The last name, the founder of the monument, is the same person before whom Apuleius, author of the "Golden Ass," so eloquently pleaded his cause when summoned to the tribunal of the proconsul Claudius Maximus on a charge of fraud and sorcery. The family of Granius, mentioned in the previous lines, were the plaintiffs in the case. This monument, therefore, is one possessing the deepest historical interest.

The epitaph of Lollius himself was found at Kheneg, and was as follows:—

Q . LOLLIO . M . FILIO .
QVIR . VERBICO . COS .
LEG . AVG . PROVINC . GERM .
INFERIORIS . FETIALI . LEGATO .
IMP . HADRIANI . IN . EXPEDITIONE
JUDAICA . QVA . DONATVS . EST
HASTA . PVRA . CORONA . AVREA . LEG .
LEG . X . GEMINAE . PRAET . CANDIDAT .
PROCOS . ASIAE . QVEST . VERBIS . TRIB
LATICLAVIO . LEG . XXII . PRIMIGENIAE .
III VIRO . VIABVM . CVRAND .
D.D. PATRONO P.P.

To Quintus Lollius, son of Marcus (of the tribe of Quirina (surnamed) Urbicus; Consul, Legate of the Emperor in the province of Lower Germany; Fetial, Legate of the Emperor Hadrian in the expedition to Judea, where he was presented with a pure lance (or without an iron head), a crown of gold; Legate of the Xth Legion Gemina, Praetor, Candidate of Caesar, Tribune of the People, Candidate of Caesar, Legate of his Pro-Consul of Asia,

Quæstor of the City; Tribune laticlære of the XXII. Legion Primigenia, one of the Four Inspectors of Roads; Patron. By the decree of the decurions, and at the public expense.

Dolmens of Kheneg.—On the S. W. declivity of the rocky crest of Kef-oum-Hadidan, at 500 mètres from the remains of the Roman citadel, are three dolmens close together; the flat slabs are 2'30 to 2'50, and the upright ones 1'50 in height. Enclosures of rough blocks, of irregular shape, surround them, leaving only a narrow passage between them and the dolmen. They are called by the natives El-Haounet, the shops. A few steps farther down are the remains of several more, and amongst them some of a circular form.

Lastly, mention must be made of the **Quarries of Oriental Alabaster** recently discovered at Ain-Smara. This village is 18 kil. from Constantine on the road thence to Algiers, and the quarries are in the hills about 6 kil. to the S. E. of it. They bear unmistakable evidence of having been worked by the Romans; the columns in the Church of St. Paul, *extra muros*, at Rome are said to be made from this material, and it was certainly largely employed for the decoration of the capitol at Timegad, where large slabs of it have recently been unearthed.

Some of the alabaster is almost colourless, or of a faint yellow tint, resembling the well-known Algerian onyx of Ain-Tekbalet. It is exceedingly delicate and translucent, and blocks of great size can be obtained. Other varieties, finely striated like the former, have been stained with iron, and present every variety of colour, from white to pale yellow, passing into pink and deep red. In some instances the carbonate of lime seems to have been precipitated round nodules of varying size and form, following their outlines in a most grotesque but beautiful manner; again water-worn pebbles have been cemented together, forming a beautiful conglomerate. These quarries were discovered by M. Cantini, the well-known marble merchant at Marseilles, and are being extensively worked by him.

ROUTE 12.

Constantine to Algiers, by the Chabet el-Akhira.

From Constantine to Setif there are two trains daily. From Setif to Bougie there is a service of diligences daily, starting at a very early hour in the morning, and taking about fourteen hours; but it is best to hire a carriage and make the journey in two days, spending the night at Kharata.

For several reasons it is more advisable to make the journey from Setif to Bougie than from Bougie to Setif: it is always easier to descend a hill than to mount one; the scenery is far grander looking down than looking up; and it is better to pass through the tamer scenery first, and thus prevent the grandeur of the Chabet from dwarfing what, under any other circumstances, would be considered a very beautiful landscape. The diligence is much cheaper and not at all bad when descending, but the traveller should avoid it when ascending, as it starts so early that owing to darkness he misses some of the finest scenery, which is not the case when leaving Setif.

Almost any amount of inconvenience will be repaid by the magnificence of the scenery between Kharata and Cap Okas, which is hardly to be surpassed in any part of the world. There is certainly nothing to equal it within easy range of the basin of the Mediterranean, except perhaps in Corsica.

It was the Commandant Capdepont who made the first reconnaissance of the *Chabet el-Akhira*, and suggested it as a route between Setif and the sea. M. L'Épinay was the engineer who first reduced this idea to a practical form: the route was traced by the military engineers, and subsequently completed by the department of the *Ponts et Chaussées*, under M. de Lannoy, in 1873.

It offers the double advantage of being shorter than any other route, as it reduces the distance between Setif and the sea to 102 kil., and it traverses for a shorter distance the region where

snows may impede circulation in winter.

Many travellers who do not intend visiting Constantine may content themselves with a journey from Bougie to Kharata and back (see p. 115).

Setif. (See p. 170.)

The road leaves *Setif* by the *Porte de Bougie*, and crossing the parade-ground descends the valley of *Fermatou*, crosses the head of the river *Bou Selam*, and arrives at

4 kil. *Fermatou*. A small village on the left of the road.

At 4 kil. N.E. are the Roman ruins of *Ain-el-Hadjjar* (Spring of the Stone).

The road then crosses the *Oued Goussimet*, near which branches off another horse-path to the W., which, making a considerable circuit, rejoins the new road beyond Ta Kitount.

The road now pursues a northerly direction, through a series of richly cultivated valleys belonging to the *Compagnie Gènevoise*.

11 kil. *El-Ouiricia*. A small village belonging to the same company. It was entirely destroyed during the insurrection, and one of the colonists who refused to leave his property was murdered, but it has been rebuilt since then. Here a road branches off to the right, leading to a farm of the Geneva Company.

14 kil. Road crosses a long chain of hills running E. and W., the eastern peak of which is *Djebel Assel*, and *Mount Babor* bursts into view.

15 kil. *Borj of Kaid Mansour* on left of road. Lower down numerous Kabyle villages and gardens along the *Oued Faïd*.

21 kil. *Ain-Maghramma*. Relay.

22 kil. The road here takes a N.W. direction, following the course of an affluent of the *Oued bou-Tafsa* to

28 kil. *Les Ammoucha*.

32 kil. *Col de Ta Kitount*, where is a small roadside auberge. Shortly before reaching it, on the left-hand side, is a spring of ferruginous aerated water, very agreeable to drink, and which is bottled off and sent all over the country. From the *Col* is seen the fort of *Ta Kitount*, perched on an elevation to the left. It resisted all

the attempts of the Kabyles to take it in 1871. It is situated 8448 feet above the sea, and commands a splendid view of the country round. The present fort is built on the site of a Roman work, as is proved by the numerous fragments of sculpture, coins, etc., which have from time to time been found here.

47 kil. After a rapid descent to the bed of the *Oued Berd*, the road turns to the left and crosses an affluent of that river, the *Oued Allaba*, by a lattice bridge.

Not far from this spot is the hot alkaline spring of *Hamman Gergour*.

Beyond this a bridge crosses the *Oued Berd*, carrying the road to the right bank of that river. It now crosses several streams, one of which, the *Oued Tamala*, is salt, and reaches 53 kil. *Kharata*, where is a good hotel.

Up to this point the scenery is very fine, but it is at *Kharata* that the gorge of the *Chabet el-Akhira* commences.

Kharata is 1280 feet above the level of the sea, and possesses a fine summer climate. The gorge acts as a huge windsail, so that even during the hottest days of summer there is always a fresh breeze blowing through it from the sea.

[From *Kharata* an excursion might be made to the top of *Mount Babor*.

The ascent is by no means a difficult one, and may be made nearly to the summit on mules. It would be as well to take a tent and camp for two nights at the village of *Oulad Sead*, or any other near the top, and devote the intervening day to an exploration of the summit. Guides and mules can easily be procured at *Kharata*, and the hospitality of the Kabyles to travellers is proverbial. (See also *Route 20*.)

Babor is 6447 feet above the level of the sea; the summit, which is covered with snow during a great portion of the winter and spring, is crowned with a forest of cedars and pinsapos. The latter is a variety of the Spanish species *Picea Pinsapo*,

and is found only on two peaks of the Atlas, *Babor* and *Ta-Babort*, where it was discovered in 1861. It is remarkable for the pyramidal form of its trunk and top, and for the hardness and compactness of its timber.

The forests on the two peaks have an area of 9000 acres, but for all practical purposes they are unapproachable.

The view from the peaks is exceedingly grand. Care, however, should be taken not to attempt the ascent save in very settled weather. May and November are the best months, the former especially, as then the country is clad in its vernal tints.]

Immediately beyond Kharata commences the entrance to the gorge, and the first idea that crosses the traveller's mind is the powerlessness of words to depict scenery so grand.

A huge defile, 7 kil. in length, winds in a tortuous manner between two mountains, from 5000 feet to 6000 feet high. At the bottom, an impetuous torrent has worn itself a deep and narrow channel, from either side of which the rocks arise sometimes almost perpendicularly, sometimes actually overhanging the bed of the river, to a height of nearly 1000 feet. So narrow is this gorge, that although the road is cut in the side, at from 100 to 400 feet from the bottom, there is hardly any spot where a stone could not be thrown from one bank to another, and so steep is it, that before the first trace of the road was made by the French an Arab could not pass along it on foot! The only means of approaching it was by descending and ascending the lateral valleys, and exploring a small portion of the main ravine on each side of them.

For about half its length the road passes along the right bank; it then crosses to the left side by a curved bridge of seven arches, which side it subsequently follows during its whole course. There are numerous lateral valleys, each adding its tribute of water to the main stream, frequently by the most beautiful cascades.

The peculiar vertical stratification

to be seen here is in some places not unlike that of the *Portes de Fer*, but the substance being harder, it does not form itself into such grotesque shapes.

Wherever there is a slope sufficient to retain a little earth, it is covered with luxuriant vegetation; and as the road approaches the end, trees become more abundant, and finally the slopes are clothed with a forest of cork and other oak trees.

On a stone, about the middle, is engraved the legend—" *Les premiers soldats qui passèrent sur ces rives furent des Tirailleurs, commandés par MM. Desmaisons, etc., 7 Avril, 1864.*"

Troops of monkeys are often met here, and the holes and caves in the rocks afford shelter to great coveys of pigeons, themselves the objects of attraction to the eagles seen soaring above.

61 kil. The gorge ends; on a rock to the left is carved the inscription:—

PONTS ET CHAUSSÉES
SETIF.
CHABET-EL-AKHJIRA
TRAVAUX EXÉCUTÉS
1868-70.

The Borj of *Kaid Hassen* is some little distance off, amongst the hills; this is in the country of the *Beni Ismail*, and it is here that the short cut from *Cap Okas* joins the high road.

The scenery from this point, though of a different character, is hardly less beautiful than the Chabet. The river here takes the name of *Oued Agrioum*, and the hills on each side widening out, it flows along a much wider bed in the most beautiful tortuous manner, through thickets of oleanders.

This region is finely wooded; the summits of the hills are covered with pines and cedars, and their slopes, furrowed in every direction with perennial streams, are clothed with forests of cork and other varieties of oak, the finest of which is the *Chêne Zain* (*Quercus Mirbeckii*), while the ground amongst them is brilliant with bracken, heath (*Erica arborea*), myrtle, and a thousand wild flowers of every tint and hue.

The mineral wealth of these hills is also great, though hardly at all developed; rich mines of iron, copper, and argentiferous lead ore have been discovered, and only await means of conveyance to the coast to enable them to be worked with advantage.

77 kil. The road now leaves the *Oued Agrioun*, and turning westwards, passes along a plain covered with brushwood and some fine trees. Here, and all along the route to Bougie, are noble specimens of the Atlas ash (*Fraxinus Australis*), which, in its spring foliage, is most beautiful. Grand old olives mixed with them afford, by their more sombre green, a grateful contrast to the lighter tints of the other.

85 kil. *Sidi Raihan*, a small inn, "Rendezvous de Chasse," affords sleeping accommodation if necessary. A convenient place for *déjeuner*.

87 kil. Here commences the ascent of Cap Okas.

This is a bold and bluff promontory jutting out into the sea, on the vertical cliff of which a road has been rather excavated than built, at a height of 100 feet above the sea, like the stern gallery of an old ship of the line. The view both E. and W. is most beautiful; on one side is a long stretch of beach fringed with green, behind which rise the hills whence the traveller has just emerged, and beyond these the more distant blue mountains culminating in the snow-clad peak of Babor. On the other is the Gulf of Bougie, a vast amphitheatre of water bounded by the most picturesque mountains.

Near Cap Okas is the tomb of a venerated saint, *Si-Mohammed bin Nasir*, a man of such holiness that, though living in absolute solitude, whenever he began to pray the Marabouts of all other countries flocked to him in the form of birds to hear but the sound of his voice!

95 kil. *Tichy*, a small wayside post-office.

The road now crosses the *Oued Djemâa*, and traverses the plain of Bougie between well-wooded mountains and the sea.

This plain is to a great extent overgrown with brushwood and bracken, but it is fertile and well-watered, and was highly cultivated by the Romans, as the remains of farms and hydraulic works testify. During the first years after the conquest it was the scene of constant combats, and even in 1871 it was occupied by the Kabyles, and all the European buildings on it destroyed.

At first it was a hot-bed of malaria, but as soon as it was possible for the French troops to commence works of drainage, the malaria disappeared.

105 kil. The *Oued Souman*, the name here given to the *Oued es-Sahel*, is crossed by an iron lattice bridge; the road subsequently passes over several other streams and reaches

112 kil. **Bougie.** (See Rte. 1.)

ROUTE 13.

From Bougie to Beni-Mansour and on to Algiers by Railway.

Kil.		Kil.
..	BOUGIE	89
12.	La Réunion	77
24.	El-Kseur	65
32.	El-Maten	57
42.	Sidi-Aïch	47
47.	Takriets	42
54.	Ighzer-Amokran	35
58.	Azib-ben-Abi-Chérif	31
65.	Akbon	24
76.	Allaghan	13
81.	Tazmalt	8
89.	BENI-MANSOUR . . . . .	..

This line ascends the *Oued es-Sahel*, which commences near Aumale, and terminates in the Gulf of Bougie, at 4 kil. E. of that city. This river, known to the ancient geographers by the name of *Nasava*, *Nasoua*, or *Nasabeth*, like most of the rivers of Algeria, changes its name according to the territory it traverses. Thus it is successively called *Oued Akbou*, *Oued Souman*, *O. Beni Mésaoud*, and *Oued el-Kebir*, the great river. Its mean breadth is 40 mètres, but in some places it is as much as 200 mètres wide, and its depth is equally variable. Its principal affluents are, on the right

bank, the *Oued bou-Sellam*, coming from near Setif, and the *Oued Amazin*, which descends from *Guisar*. The only important one on the left bank is the *Oued Gheir*. In summer the water decreases greatly, and more than half its bed is dry; but in winter it swells with every fall of rain, and becomes a formidable torrent.

In 1847 Marshal Bugeaud descended it to Bougie, where he met the column of General Bedeau from Constantine, which had come by Setif; these were the first French troops who made a reconnaissance of this part of Kabylia. Many of the tribes tendered their submission to these officers, and later, in 1849, Generals de Salles and Saint Arnaud, after a severe struggle, conquered the Beni Seliman, and again visited the tribes who had before submitted.

This valley has always been ready to rise on the slightest provocation. It was the scene of the insurrection of Bou Baghal, and it was from Seddouk, the residence of the Haddad family, that the *mot d'ordre* was given which spread the flames of revolt over Kabylia in 1871 (see p. 61).

The principal riches of the district are olive oil, honey, wax, and grapes; the last are rarely made into wine, but sent to the market at Algiers, where they arrive after all the others are over, and command a high price. They are also made into raisins.

12 kil. *La Réunion*, a village near the Oued Gheir, created in 1872.

After passing this village is the *Tombeau de la Neige*, a monument erected in honour of a company of French soldiers lost in a snowstorm.

24 kil. *El-Kseur*. On the S. of the line are the ruins of El-Kseur.

The name "The Palace" has been given on account of the ruin of an entrenched camp, built in *béton*, by Abou Tachefin, Sultan of Tlemçen, about A.D. 1327, during his futile attempt to take the city of Bougie. He retired in the following year, leaving, however, troops stationed along the Oued es-Sahel.

About 4 kil. from it are the ruins of *Tiklat*, Θ , the ancient Tubusuptus.

A very fine cistern still remains, capable of containing 12,000 cubic metres of water.

[From this place there is a road to Tiziouzou, which many will prefer to the ordinary railway journey to Algiers. By sleeping one night at *Azazga*, a very pleasantly situated village, where there is a clean though poor hotel, the journey can be made in two days, arriving the second day at *Tiziouzou* in time for the evening train to Algiers. Carriages can always be hired at Bougie and generally at *Azazga*. There is no very striking feature on the road, such as the Chabet pass, but it is exceedingly lovely throughout, passing through some of the finest forest scenery in Algeria.]

On the opposite bank of the river is *Oued Amisour*. It is situated about 3 kil. from the right bank, and 26 kil. from Bougie. A road will eventually connect it with Bougie by the right bank of the river.

32 kil. *El-Maten*, a small village near the Oued Tifera: north of the line, on the hill above, is a Kabyle village of the same name.

42 kil. *Sidi-Aich*, an important village where a market is held every Wednesday. The land is well suited for the growth of figs, olives, and other fruit. The administrator of the district resides here. Numerous Kabyle villages may be seen perched on the hillsides in every direction.

The line now crosses the valley by a fine viaduct.

47 kil. *Takriets*, a road to the S., conducs to Seddouk, the country of the famous Haddad family, whose chief, Sheikh Mohammed Amzian bin Ali El-Haddad, Mokaddem of the great religious confraternity of *Sidi Mohammed bou Koberain*, from his cell at *Seddouk*, which he had not quitted for many years, in one day set the whole of Kabylia in flames. Without his order the insurrection of 1871 could never have extended to Kabylia. He died in Constantine a few days after his condemnation; his body was embalmed, and will no

doubt one day be transported to Kabylia, hereafter to become an object of veneration for future generations, if permitted by the French. His sons were also sentenced to perpetual imprisonment in New Caledonia, but escaped.

54 kil. *Ighzer-Amokran.*

58 kil. *Azib-bin-Ali-Chérif*, the charming residence of the well-known person whose name it bears.

Si Mohammed Said bin Ali Cherif is descended from a Moroccan Cherif, Moulai Abd-es-Selam bin Machiche, who settled there in the 18th century. He married the daughter of the Marabout of *Illoula*, and their descendants have ever since been at the head of the *Zaouia* of *Chellata*. This family has produced many writers of celebrity, and, though it remained on amicable terms with the Turks, it never submitted to their authority. The present head of the family rendered great services to the French at the period of the conquest, was especially honoured by the late Emperor, and was created Bach-Agha of Chellata. Having unfortunately allowed himself to be drawn into the insurrection of 1871, he was tried and convicted at Constantine, but subsequently received a free pardon from Marshal de MacMahon, President of the Republic, who better than any man living knew the value of his former services.

He has a large house and beautiful garden, but the traveller will hardly find time to visit it. He has also some splendid olive groves which yield a large income.

65 kil. **Akbou.** Pop. of village 1302; of commune *mixte*, 61,165. An important village to which a vain attempt was made to attach the name of *Metz*. It is situated on an elevated mound to the north of the high road, with a charming view looking both up and down the valley; the land allotted to the colonists is of an unusually good quality.

Close to it is the old Borj of Bin Ali Cherif, purchased by the State before the insurrection.

On the opposite side of the river is a ridge of steep hills close to its right

bank called *Geldaman*, the western point of which has been separated from the rest by the river, and now forms an isolated *namelon* in the middle of the plain called the *Piton d'Akbou*, which is seen from a great distance on both sides. On a small platform at the west side of this hill, and about 100 feet above its base, is a remarkable Roman mausoleum, still in a good state of preservation. The general shape is that of a pyramid surmounting a cubical base, three of the sides being decorated with false windows, while the fourth contained the door. Above the latter was an inscription in white marble, no trace of which now remains. The execution of the monument is admirable, but the style is debased. It can be seen from the train.

[From Akbou the ascent of the Djurdjura range, by the pass of Chellata, may be made. See Route 20.]

76 kil. *Allaghan.*

81 kil. *Tazmalt.* Pop. 383.

The richest village in the valley; it takes its name from the Borj of the same name, on the opposite side of the valley, destroyed in the insurrection of 1871.

89 kil. **Beni-Mansour** (see p. 168). Here the railway joins the main line between Algiers and Tunis.

ROUTE 14.

Constantine to Batna (Timegad) and Biskra.

Kil.		Kil.
..	EL-GUERRAR	202
13	Ain-Melila	189
31	Les Lacs	171
47	Ain-Yagout	155
56	Fontaine Chaude	146
64	El-Maader	138
70	Fesdis	132
81	BATNA (Buffet)	121
92	El-Biar	110
114	Ain-Touta	88
122	Les Tamarins	80
146	El-Kantara	56
165	Fontaine des Gazelles	37
174	El-Outaïa	28
184	Ferme-Dufour	18
202	BISKRA . . . . .	..

Algiers to El-Guerrah. See Route 8. The traveller may conveniently break his journey either at Bordj Bouira or at Setif, if he considers the whole distance (fifteen hours) too much to be done in one day. By selecting the latter stopping-place the journey can be done in two days of moderate length.

El-Guerrah is the junction where the line to Biskra joins that between Algiers and Constantine. There is a tolerably good hotel here where one can pass a night. It has an excellent restaurant.

A proposition has been made by the *Conseil Général* of Algiers that the rate of speed on this line be augmented, and that a dining-car be attached to the train, as in the case of that to Oran. If this be carried out the necessity for sleeping at El-Guerrah will be obviated; a traveller will be able to leave Algiers at 6 A.M., arrive at El-Guerrah at 7 P.M., and reach Biskra at midnight.

13 kil. *Ain-Melila*.

31 kil. *Les Lacs*. There are two salt marshes called *Tinsilt* and *Mzouri*, partly covered with long grass, and the haunt of flamingoes and other wild fowl. A few Europeans engaged in the manufacture of salt live here, but otherwise the country is only occupied by Arabs, whose flocks and herds may be seen all round.

47 kil. *Ain-Yagout*. The station is about 1500 mètres from the village. This is the nearest station from which to visit the **Medrassen**, and mules and even a carriage can be obtained for that purpose. The best plan for making the excursion is to stop here by the train from El-Guerrah, and continue the journey to Batna in the evening. The interval, nearly eight hours, is amply sufficient to ride to the Medrassen. The distance is less than 10 kil. Or it may be done from Batna by taking the morning train and returning in the evening. It can be seen very distinctly from the train, a little before it reaches the *prise d'eau* of Fontaine Chaude.

This remarkable monument, very similar to the Tombeau de la Chrétienne

near Algiers, was situated on the high road between Theveste and Diana Veteranorum. The form is that of a truncated cone, placed on a cylindrical base, 58·80 mètres in diameter; the total height is 18·30 mètres. The lower portion, which forms a vertical encircling zone or ring, is ornamented by sixty engaged columns, of which not one-half are now perfect. The upper part, or roof, gradually diminishes by a series of steps, each 57 cent. in height, and 92 in breadth. The columns are stunted, much broader at the base than at the top, the height being about four times the lower diameter. They rest on three steps, which serve as base both to the monument and to the columns. The capitals are Doric, and above them is an entablature with a large, bold cavetto, as if of Egyptian origin. Commandant Foy, probably following the description of Shaw, calls them of the Tuscan order; Colonel Brunon, criticising the former, remarks that the capitals belong rather to the *genre Egyptien* than to the Tuscan order, the truth being that they are neither one nor the other, but purely Greek. Greece and Egypt seem to have inspired the ornamentation, while the *tumulus* suggested the monument itself, as it did the Tombeau de la Chrétienne, Etruscan tombs, and the Pyramids of Egypt. The actual conical part has lost its apex, if it ever had one. The exterior masonry is remarkably fine, the stones being of great size, well cut, the joints not more in some places than the thickness of a knife, and each stone joined to its neighbour by a massive clamp, probably of lead, the search for which has greatly contributed to the destruction of the building. Unfortunately the interior masonry was of a much inferior kind, and an extensive subsidence of it has caused a dislocation of the outer coating.

Various attempts had been made to penetrate it, but for a long time without success. Salah Bey endeavoured to force an entrance by means of artillery. General Carbuccia commenced to explore it in 1849 and discovered the passage leading to the

sepulchral chamber; but owing to the roof having fallen in he was unable to penetrate farther. Commandant Foy resumed its exploration with no better success; Monsieur le Garde du Génie Bauchetet failed likewise in 1866; but being again sent in 1873, with more ample means, he succeeded in clearing away the *debris* and penetrating to the central chamber, which he ascertained to be 3·13 mètres long by 1·40 mètres broad. Nothing of any interest was found inside, but clear evidence was obtained that it had been opened at some former period, and that an attempt had been made to destroy the building by means of fire. Great quantities of charcoal and lime (the latter the calcined stone of which it is built) were discovered, and the fire having communicated to the woodwork which supported the roof of the passage, the superincumbent masonry had fallen in and obstructed the entrance. The masonry in the passage and chamber is very inferior to that of the Tombeau de la Chrétienne, and it differs from the latter by the passage going straight to the centre instead of in a spiral direction.

Numerous tumuli, also of a circular form, were discovered around, together with the traces of a bastioned enclosure, proving the place to have been an immense necropolis, subsequently used as a fortress, of which the Medrassen was simply the principal tomb.

There have been many speculations as to the meaning of the word and the destination of the building, which is not mentioned by any classical author. There can, however, be little doubt that the word *Medrassen*, as it is usually written, or *Madghassen*, which is the more correct orthography, is the plural of the Berber word *Madghes*, the patronymic designation of an ancient family from which Masinissa was descended. Ibn Khaldoun says that Madghes was the son of Berr Ibn Kais; he bore the name of El-Abter, and was the father of the Berbers-Botr. The name still exists in that of the tribe inhabiting the vicinity, the Haracta-*Mäader*, and in that of a stream, the Oued *Müader*.

It is much more probable that this was the tomb of the Numidian kings—perhaps of Masinissa—than that of Syphax, to whom it has been referred, whose capital was at Siga, near the Tafna, and who only occupied Cirta for a short period. This would lead us to assign the date of B.C. 150 as about that of its construction, a supposition amply supported by the style of the architecture.

64 kil. *El-Mäader*, see above.

70 kil. *Fesdis*, a small village on the Oued Batna. The arid plateau, over which the line has hitherto been carried, here gives place to a partially wooded valley, which forms an agreeable contrast to the plains.

81 kil. **Batna** (the Arabic word *Batna* means *we have spent the night*, or bivouac).

Pop. 3394; 3350 feet above the level of the sea. Headquarters of a military subdivision.

The streets are wide, built at right angles, and lined with low tiled houses, the whole town being enclosed by a wall. The principal building is the *Barracks*, which can hold 4000 men. In the neighbourhood is a curious negro village of sun-dried bricks.

Batna was occupied shortly after the expedition of the Duc d'Aumale to Biskra in 1884, to command the passage by which the Nomads of the Sahara periodically enter the Tell; in this sense it is of great importance, but to the traveller it is of no interest whatever, save as being a convenient halt between Constantine and Biskra, and the starting-point of excursions to Lambessa, Timegad, the Cedar forest, and the Aurès mountains.

EXCURSIONS IN THE NEIGHBOURHOOD OF BATNA.

To Lambessa, Markouna, and Timegad.

This can be done in one long day, but it is better to devote the afternoon of the day of arrival to the first two places, and to give an entire day to Timegad. A carriage for the first ex-

cursion will cost 12 f., for the latter 30 f. The road is now excellent, and the drive from Batna to Timegad can be done in from 3½ to 4 hours. The distance is 37 kilometres. The same road conducts to all three places.

Lambessa is 10 kil. E. of Batna.

The modern village is close to the Roman ruins; the principal building in it is the prison once occupied by political offenders, mostly victims of the *Coup d'État*; but now it is an ordinary convict establishment for Europeans and natives.

Lambæsis was a purely military town, built in or about A.D. 169, as the headquarters of the army of occupation and of the Third Augustan Legion; around it the families of the soldiers, and the merchants who gained a living by them, grouped themselves, till it ultimately became an important city of about 60,000 inhabitants.

The camp itself was a rectangle of 500 mètres long by 420 broad, exactly facing the N. Little of its ramparts remain, but recent excavations clearly show its size and form. Part of the prison and its gardens occupy the S.W. corner of the position. It was entered by four gates, of which only those on the N. and E. faces still remain. The former was the principal one; it had two openings, and was defended by towers engaged in the wall. From this point two roads proceeded, one to Tebessa, and the other to Constantine and Setif. It was the custom of the Romans to place the tombs and monuments of the dead on each side of the high roads; those just mentioned have many in the vicinity of the place.

Two streets traversed the camp from N. to S. and from E. to W.; at their intersection stands the principal ruin of the place, the **Prætorium**.

It is a large rectangular edifice, 28 mètres long, 20 mètres broad, and 15 high. The principal façade, to the S., had a splendid peristyle, having massive columns in front, which corresponded with Corinthian pilasters engaged in the walls. This extended only to half the height of the wall, leaving a second story externally, but

there is no trace of this in the inside, which is undivided in height. The other sides also are decorated with detached columns, corresponding to the pilasters of the lower story, the cornice turning round and forming the entablature. On the N. side there are three detached columns on each side of the principal entrance, between which and the smaller doors is a niche to contain statuary. All the key-stones are sculptured, but not very artistically. That over the principal gate bears a basso-relievo of a standard, with the inscription "Legio tertia Augusta." The interior forms a vast hall; on each side there is one large and two smaller doors, and above the central and larger ones another arched opening, used probably as a window. The walls are strengthened internally with pilasters, on which are engaged columns; still it appears doubtful whether the building ever was covered otherwise than by a velarium.

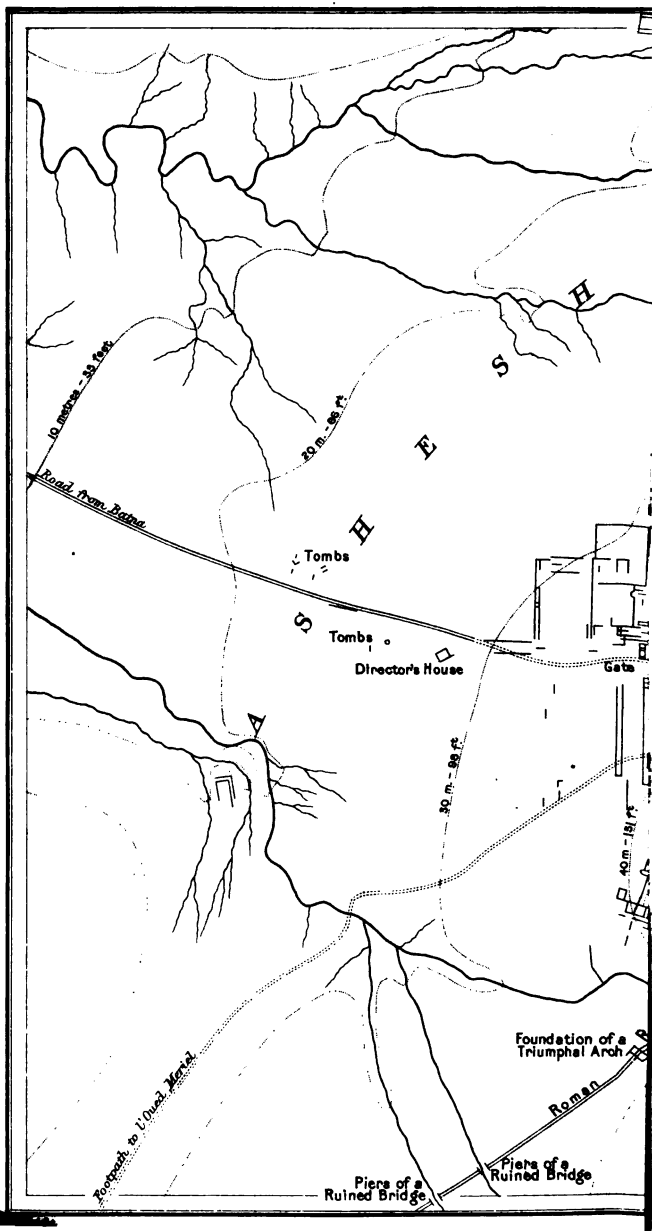
The interior has now been converted into a museum, wherein are collected various objects of antiquity which have been discovered in the vicinity; the best of these, however, have been sent to the museum of the Louvre at Paris.

To the S.E. of the Prætorium, still within the military camp, are the ruins of **Thermæ**, in which some fine mosaics were found—other mosaics still exist *in situ* within the gardens of the prison.

If we now leave the camp and proceed towards the E., we come to what is called the **Arch of Commodus**; it is tolerably entire, but of an exceedingly depraved style of art; there are two niches on each side, but without any archivolts. Through this passed the road leading to *Verecunda*, *Thamugadi*, *Mascula*, and *Theveste*. On the opposite side of the road may be traced an **Amphitheatre**, nearly circular in shape; it must have been large enough to accommodate 12,000 spectators. It is now almost entirely destroyed.

About a kilomètre to the S.E. of the Prætorium is the **Arch of Septimius Severus**, the public **Latrinæ**, the so-called **Palace of the Legate**, and still





farther to the S. the **Forum**. Near it is the **Temple of Æsculapius**, constructed by Marcus Aurelius, of which only one column is now standing. It was a remarkably fine building, and, like the amphitheatre, not many years since its façade was entire. W. of the Forum is the octostyle **Temple of Jupiter**, a most interesting building which has lately been cleared of *débris*.

An *aqueduct* led from the spring called Ain-Boubenana to the southern gate of the camp. The principal *Necropolis* was to the E. of the city, between the Oued Neheb and the Oued Markouna, and covered an area of more than 15 hectares.

About 3 kil. to the N. of the Prætorium is the **Tomb of T. Flavius Maximus**, commander of the Third Legion, which has been carefully restored by the French. It is a square, terminating in a pyramid, about 6 mètres in height. According to an inscription it was erected to carry out the will of Maximus, who left 12,000 sesterces for that purpose, by Julius Secundus, a centurion of the Third Legion, of which Flavius Maximus was prefect. When the remains of the Roman general were replaced in the tomb by the French after its restoration, the garrison of Batna marched past and fired a salute in his honour.

At 3 kil. S. of Lambessa are the ruins of **Markouna**, the ancient *Verecunda*. This was probably a suburb of the former city. There still exist one large and one smaller triumphal arch; on the attic of the former, which is close to the road, may still be read the name—

RESPUBLICA VE . . .

In the property of Si Ben Driss, a well-known captain of Spahis; close to the arch, are many inscribed stones and pieces of sculpture, some of them of great interest.

The traveller will arrive at **Timegad** at the north side of the hill on which the city stands, close to a house built for the director of the works; there shelter, if necessary, for man and horse can be obtained.

The ruins of Timegad are certainly the most remarkable in the colony, and it is quite pardonable in the French to style them the Algerian Pompeii. Extensive excavations have lately been carried out, and as a yearly sum of 45,000 f. is allowed for the work, it is probable that the entire city will eventually be laid bare.

The place was first visited by the author in 1875, and described in his *Footsteps of Bruce*. Shortly after an excellent report on them was written by Professor Masqueray; in 1880-83 they were carefully examined and excavated by the Government engineers, under the supervision of M. Duthoit, architect-in-chief of historical monuments in Algeria, whose admirable plans of Timegad and Lambessa have been published in the *Proceedings of the Archaeological Society of Constantine for 1883-84*; they were described and illustrated by Mr. Alexander Graham, in an article on the Remains of the Roman Occupation of North Africa, published in the *Transactions of the Royal Institute of British Architects*, vol. i., New Series, 1885. A very beautiful work on them (from which the plan is borrowed) is in course of publication, under the auspices of the "Commission de l'Afrique du Nord," entitled *Timegad, une cité Africaine sous l'Empire Romain*, by G. Boeswillwald and R. Cagnat; and lastly, a small brochure has been published by M. Baku, architecte en chef des monuments historiques en Algérie, *Tebessa, Lambèse et Timegad*, 1894, 8vo, p. 39, with photographic illustrations.

Thamugadi was situated at the intersection of six Roman roads; two went through Lambësis, in the direction of Setif; a third to Diana Veteranorum (*Zana*); two more to Theveste by Mascula (*Khenchla*), and a sixth northwards to Constantine. It appears to have been of as great importance as Lambessa, to judge by the size of its public buildings, especially the theatre, and the area covered by its remains, while its architecture is undoubtedly older and purer. There is nothing at Lambessa to equal the

triumphal arch here. On an inscription, still in perfect preservation near the Forum, there is an allusion to the thirtieth *Legion Ulpia*, and a celebration of the victories of Trajan over the Parthians. From this M. Leon Renier concludes that the Emperor, wishing to recompense the veterans of the thirtieth legion, *Ulpia Victrix*, for their participation in the war against the Parthians, established them at Timgad, not only as being a vast and fertile country, but a position of great military importance, from which they might be able to suppress the turbulence of the neighbouring mountaineers.

The inscription above mentioned exists in duplicate on two fine pedestals of white marble, of octagonal shape, the height being $1\frac{1}{2}$ metre, and the width of the faces from 50 to 30 centimètres.

It subsequently became the great focus of religious agitation during the 4th century. In 398 its bishop, Optatus, sided with the Count Gildon in his revolt against Honorius, and was regarded as the recognised head of the Donatists. St. Augustine, who often alluded to him, says that during ten years Africa trembled under his yoke. Amongst other bishops of Tamugadi are Novatus, who assisted at the Council of Carthage in 255; Sextus, who died in 320; Faustinus, who was present at the conference of Carthage in 411; and Secundus, who was exiled by Huneric in 484.

When Solomon arrived for the first time in the Aurès, in 535, he found the city ruined. It had been destroyed by the inhabitants of the Aurès mountains so as not to become a source of danger to them should the Byzantines take it. He restored the citadel at least, in the same style as the other fortresses throughout the country. The proof of this is evident; but the other public buildings bear no trace of a restoration posterior to their original construction.

At the time of the Arab invasion it was a Christian city, as in 646, under the government of Gregory, a Christian church was built, the ruins of which still exist. It is a square building,

with a circular apse at the east end, divided into a nave and two aisles by columns, three on each side, of rose-coloured marble, the centre one on each side only being free; the others are engaged in the walls, right and left of the apse and of the entrance. On the lintel of the door was inscribed on white marble:—

In temporibus Constantini Imperatoris
Fl. Gregorio Patricio Joannes dux
de Tigisi offeret domum Dei+ Armenus.

The ruins occupy a large undulating plateau, through which a deep water-course runs in a direction from W. to S.; this was formerly arched over and formed a vast drain. All the most important buildings are to the E. of this; on the W. side are many ruins, but none of them of a very important character. Amongst them is the basilica before described.

It was the custom of the Romans as soon as they had selected the site of a city, to trace two lines at right angles to each other, one from N. to S. and the other from E. to W. These were called *Cardo Maximus* and *Decumanus Maximus*; they became the principal streets of the city, and their point of intersection was chosen for the site of the Forum. The traveller alights at the Director's house when reaching Timgad. Immediately in front of him is the *South Gate* of the city, the termination of the *Cardo Maximus*. The piers on each side of the gate are in good preservation, but the arch has disappeared. Fragments of a boldly traced inscription which once adorned the attic are lying beside it. From this a paved road, which had a colonnade on each side, leads directly to the Forum.

The **Forum** has lately been entirely unearthed. The N. façade on the *Decumanus Maximus* had a colonnade in its entire length, from which the inhabitants must have enjoyed one of the most charming views it is possible to imagine. On the side next the building are numerous shops, generally of two rooms; traces of fastenings for the door are everywhere visible.

In the centre of the Forum was a

gateway of a monumental character, having an order larger than that of the colonnade. A flight of ten steps within it led into the interior of the building, which measures 49·30 mètres by 44·30 mètres, entirely paved and surrounded by a broad colonnade of the Corinthian order raised two steps above the general area.

Numerous monuments are disposed around the central court. To the E. is a **Basilica** in the proper sense of the word. The reader need hardly be reminded that the ancient basilica was a court of justice; the prætor or principal judge was seated in the apse with assessors on either side. A railing separated this from the nave. This peculiar form was so perfectly adapted for Christian worship that it was at once adopted by the western church. The bishop took the place of the prætor *in cathedra*, and his subordinates in the hierarchy those of the assessors. The altar, like the pedestal and statue of the god among the ancients, was situated before him, separating him from the congregation collected in the nave and aisles; the gallery, when there was one, became the clerestory, and the open court in front, the narthex, in which the unbaptized remained during the performance of religious ceremonies.

The peculiarity of this basilica is that it contains no aisles, from which it may be assumed that it never was permanently roofed in, perhaps only the apse was covered, and the suitors remained in the open air. On the E. side were six smaller rooms, and the interior was decorated with commemorative sculpture, some of the bases of which are still in place. The dimensions of the basilica are 38 mètres long and 20 mètres wide. The date of this monument is probably about A.D. 138, to judge from the statues and inscriptions contained in it.

To the W. of the Forum are a number of other constructions, the nature of which it is difficult to determine. One of these was the *Curia* or Municipal Council; it is constructed of rubble masonry, which leads us to believe that the walls

were decorated with marble. It contains four pedestals for statuary.

A great variety of inscriptions and pedestals lie scattered throughout the Forum, one is in a character resembling the Gothic. It runs as follows:—

Vocontio
P. Fl. Pudenti Pomponiano
C(larissimo) v(iro) erga civis
Patriamque prolixæ cultori exercitus
Militaribus effecto multifariam
loquentes litteras ampliant Atticans
facundiam ad sequanti Romano
nitori
ordo incola patrono oris uberis
et fluentis nostr(ri) alteri fonti.

Another edifice has been identified as a **Temple of Victory**, and there are several **Tribunes** from which harangues were made.

Some of the pedestals bear the names of Antoninus Pius and of Caracalla, others appear to have commemorated legates, magistrates of the city, and persons of local importance.

Several games are rudely engraved on the floors: one, in a small room at the N.E. corner, has the words:—

VENARI	LAVARI
LVDERE	RIDERE
OCEST	VIVERE.

On the pavement of the portico, opposite the Central Stair, is another with holes for marbles, and a large sun-dial is traced in the Central Court; the only hour remaining is VIII.

A passage from the Forum gives access to the **Theatre**, built on the abrupt northern flank of a hill, the opposite side of which slopes towards the S. This monument was of considerable dimensions and intended for the accommodation of nearly 4000 persons. The auditorium is quite entire, but the scena has disappeared. It is easy, however, to see where it must have been; the colonnade of the portico of the posterior façade remains entire.

The building was executed in a substantial manner, generally of solid rubble masonry faced with cut stone of considerable dimensions. In the interior, where the masonry may have been covered with cement or other

materials, the angles were made sharp by brickwork.

The columns of the portico, thirteen in number, are all in stone, of an inferior description.

This theatre is larger than that of Pompeii, but smaller than most others. Its greatest width is 63·60 mètres; that of Pompeii is 60 mètres, and that of Philippeville 82·40 mètres, while the Greek theatre of Taormina is 82·40 mètres.

Near the theatre are the **Thermæ**; the paved and mosaic floors are perfectly preserved; there are numerous remains of statuary and inscriptions fixing the date at about the end of the 2nd century, during the reign of Septimius Severus. The stone pipes which brought the water from a spring 2 kilometres distant are still in place.

To the S.W. of the theatre is the highest and most important building in the place, supposed to be a **Temple to Jupiter Capitolinus**. It must have been a very splendid edifice.

A large court existed before the entrance, as the vestiges of a colonnade are still visible parallel to the principal façade. This was most powerfully constructed; a transverse wall, which may have corresponded to the entrance of the cella, measures nearly 2 mètres in thickness, the stones varying from 1 to 1½ metre in length, and from 65 centimètres to a metre in breadth, and 50 centimètres in height.

An attic base in blue limestone lying on the spot measures 1·97 metre in breadth at its plinth. The most massive parts were built, according to the Roman system, of rubble, cased in cut stone masonry, composed of blocks of great size. The columns were fluted, of the Corinthian order, their diameter is 1·30 metre. The capitals were in two stones on account of their great size.

An inscription was here found on four stones, surrounded by a moulding, of which the following is a copy:—

Pro magnificentia seculi dominorum nostrorum Valentiniani et Valentis semper Augustorum et perpetuorum, porticus capitolii, serie vetustatis absumptus et usque ad ima funda-

menta contapsus, novo opere perfectas exornatasque dedicavit Publius Casionius Caecina Albinus, Vir clarissimus, consularis, curantibus Aelio Juliano, iterum rei publicæ curatore, Flavio Aquilino, flamine perpetuo Antonio Petroniano flamine perpetuo Antonio Ianuariano flamine perpetuo.

All the elements necessary for the reconstruction of this monument have been found; four out of the eight columns have been laid out on the ground and will soon be erected in their original position. This is a work of considerable difficulty, as each drum weighs 3600 kilos!

The interior of the cella must have been lined with beautiful rose-coloured marble or alabaster. Many slabs have been found, evidently obtained from the quarries of Aïn-Smara (see p. 210).

The size and dimensions generally of this monument must have been pretty nearly the same as those of the Pantheon at Rome. Amongst Bruce's drawings is one showing five of the columns still in place when he visited it, as also a small portion of the entablature.

If we now return to the principal entrance of the Forum, we see before us the *Decumanus Maximus*, a paved road in which the deep ruts made by chariot wheels are very visible. In the axis of this is a **Triumphal Arch**, one of the most important monuments of the kind in Algeria. It consists of three openings, the central one 3·26 mètres wide, and the side ones 2·19 mètres; above the latter are square niches for statues. The monument is of the Corinthian order; each front is decorated by four fluted columns 5·96 mètres high, occupying the angles and the spaces between the arches. To each column corresponds a pilaster, both raised on a common pedestal.

The entablature connects all the columns and pilasters together, and was itself surmounted by an attic, with an entablature, a portion of the architrave of which now alone remains. Over the two lateral arches and the square niches, and supported by the two columns, are two curved pediments, the cornices of which (as also the main cornice profile round) are set back over the columns, an arrange-

ment not unfrequent in the colonies of the empire. The attic, intended no doubt to receive the dedicatory inscription, and perhaps also to support sculpture, appears to have extended over the whole top of the building. None of the original inscription remains in place, but fragments have been found below and near the Forum, from which M. Leon Kenier restores it as follows :—

*Imperator Caesar divi
Nervæ filius Nervæ Trajanus.
Augustus Germanicus Pontifex maximus
Imperator III. tribunicia Potestate IIII.
consul III. Pater patriæ coloniam
Marcianam Trajanam Thama-
mugadi per legionem tertiam Augustam
fecit . . . unatim . . . Gallus legatus
Augusti pro prætoris
Dedicavit.*

The two façades are identical in feature, and each is in itself perfectly symmetrical, except that the capitals of the two middle columns on the southern façade, instead of having the angle of the abacus supported by volutes, have eagles in their place. The square niches have had each their separate entablature, and columns supported by sculptured brackets; all the arches have archivoltes.

The mass of the monument is of sandstone, only the small columns which supported the curved pediments are of marble. The sides of the attic were certainly covered with slabs, most probably of the same material. It was no doubt surrounded by statues and dedicatory pedestals, forming a group of which any city might be proud.

Outside this arch is **The Marketplace**, a splendid edifice founded in the 3rd century by a Roman lady whose statue and dedicatory inscription were found almost entirely uninjured. The former is in the museum; it is of white marble, 1 mètre high.

In front of it was a portico of eight columns, of which only the bases remain. This gave entrance to a large court surrounded by galleries supported by columns. In the centre was a fountain. The end of the court terminated in a hemicycle surrounded by seven shops. In front of each was a stone table, under which the sellers

had to pass, and from behind which they sold their wares. An annex of this building is supposed to have been a smaller market-place destined for a higher class of purchasers. It opens out on the main road, and was decorated with four columns.

The **Byzantine Fortress** is at some distance to the S. In all probability it was originally of Roman construction; the regular and careful masonry of that people can be recognised in some few places; a posterior restoration by the Byzantines can also be easily identified, as they invariably employed the cut stones of the former buildings, without much regard to perfect adaptation, using also tombstones and any other material that came most easily to hand. The third restoration is of a very inferior character, the stones being small, irregular, and very loosely put together.

The general plan of the *enceinte* and a great part of the walls are still entire.

It is a large quadrangle, about 110 mètres by 90, flanked on each side by salient towers, three in number. That on the eastern side is not in the middle, and is much more salient than those at the angles. In the part of this tower facing the interior may be seen the remains of a circular brick dome, the crown of which has disappeared, and in its place there is a rude attempt to complete it by means of loosely piled stones. Some remains of columns are seen in the interior court belonging to a small building, perhaps a church.

The Department of the Beaux Arts, which is conducting the excavations, has constructed a **museum** near Trajan's Arch from columns and sculptures found in the ruins. This is not yet (1895) open to the public, nor are its contents properly arranged.

No necropolis has yet been discovered, very few tombs, and only one marble sarcophagus; it was unearthed near the Director's house.

EXCURSION TO THE CEDAR FOREST.

The traveller should not miss a visit to the **Cedar Forest** situated in *Djebel*

Tuggurt, the mountain to the N.W. of Batna.

In fine weather a carriage can drive about $2\frac{1}{2}$ kil. beyond the Garde Forestier's house, which is at 15 kil. from Batna, but the excursion is far better made on horseback; it will occupy a full day. It is well for the traveller to know that after crossing the bridge over the stream he should keep to the right: an ascent of $\frac{3}{4}$ of an hour will bring him to one of the best views, *Col de Boujat*.

The trees are not so fine as those of Teniet, but the forest is very extensive, the views magnificent, and one cannot help being gratified to find a considerable growth of young trees with which the spaces left vacant by the old ones are covered. On the upper parts of the mountains and on their southern slopes there are many fine oaks, junipers, and pines. The cedars do not flourish exposed to the sirocco.

From Batna a light waggonette runs to *Ain-Khenchla*, doing the journey in twelve hours. There is also a horse road to Setif; the total distance is about 120 kil., and there are two Kaid's houses and one or two farms on the way, at which a traveller can sleep.

[Excursion in the Aurès Mountains.]

The foregoing are excursions which every tourist can do with ease during the time he is likely to be detained at Batna, but for the more enterprising traveller, who is prepared to travel on mules, and to spend a week or two in tents or in such accommodation as he may find available, and who does not shrink from an absence of every kind of European comfort and the presence of a very considerable amount of native discomfort in the shape of fleas, the author would strongly advise a tour in the Aurès Mountains. This may be made in almost any direction, as the country is thickly populated and villages are numerous. Mules will cost from 4 to 5 f. per diem, and no doubt a guide can be procured through

the aid of the authorities at Batna, without whose concurrence the journey should not be attempted.

The geographical term *Aurès*, corresponding to the *Audon* of Ptolemy and the *Mons Aurasius* of other geographers, comprises at the present day that mass of mountains stretching between the route from Batna to Biskra on the W. and the *Oued el-Arab* on the E. It does not extend farther N. than Batna or as far S. as Biskra. Its greatest length from E. to W. is 120 kil., and from N. to S. 70 kil., the whole area being about 800 square kilomètres.

Its inhabitants, the *Chawia*, are a branch of that great Berber race which has occupied the N. of Africa from the Indian Ocean to the Atlantic from prehistoric times. The Kabyles form another branch; both speak slightly different dialects of the same language, but the former shut up in their mountain fastnesses, hardly yet known to the world beyond, have remained far less mixed with foreign elements than the latter, at least since the time of the Arab conquest.

The *débris* of the Roman, Byzantine, and Vandal colonies no doubt found refuge here when driven from the surrounding plains by one set of conquerors after another, or under the influence of religious persecution, and as a consequence, both the features, language, and customs of the people bear unmistakable testimony to their classic origin.

All the old writers who have visited the country describe in glowing terms the beauty of its women. Morgan, who wrote in 1728, and whose interesting *History of Algeria* is too little studied, remarks, "What numbers have I seen, particularly females, who, for well-featured countenances, fair curling locks, and wholesome ruddy looks, might not vie with or even be envied by the proudest European dames." Shaw and Bruce bear testimony to the same fact, and the writer can honestly assert his conviction that in no country is the average of female beauty higher than in the Aurès Mountains. It is true that hard labour

from earliest youth soon causes this to fade, but nothing can mar the classical regularity of features which mark their European rather than their African origin.

Their language is full of Latin words, and in their daily life they retain customs undoubtedly derived from their Christian ancestry. They observe the 25th of December as a feast, under the name of *Moolid* (the birth), and keep three days' festival both at spring-time and harvest. They use the solar instead of the Mohammedan lunar year, and the names of the months are the same as our own. They are emphatically shepherds as well as agriculturists, having few or no cattle, but immense flocks of sheep and goats. The great difference between them and the Arabs in this respect is that the latter are nomads, while the former rarely ever leave their native valleys. The word *Zenati* is also used as a synonym for *Chawi*.

These remarks must be taken to apply principally to the *Chawia* of the Aurès; the race itself has a far wider geographical distribution, but beyond these inaccessible mountains it has got more or less mixed with other elements.

The following was the author's route, but, as before remarked, it may be varied to almost any extent, and much longer stages can be made:—

1st day.	Batna to El-Arbâa	8 hours.
2nd "	" to El-Manâa	5 "
3rd "	to Mines of Taghit	4 "
4th "	to El-Bali	4 "
5th "	to Oued Taga	4 "
6th "	to Timegad	3 "
7th "	to Omm el-Ashera	3 "
8th "	to El-Wadhaha	2½ "
9th "	to Bou Hammama	6½ "
(including ascent of Chellia).		
10th "	Ain-Meimoun	5½ "
11th "	Ain-Khenchla	5 "

Space will not admit of a detailed description of this interesting expedition; the author unwillingly limits himself to a very few remarks regarding each stage.

[*Algeria*]

El-Arbâa.—Probably the most picturesque and characteristic Chawi village in the Aurès. Situated high upon the face of a hill, the base of which is washed by a beautiful stream, and the crest of which is cut and serrated in the most fantastic manner.

El-Manâa.—The principal residence of the Kaid of the Aurès, Si Abbas, renowned for his hospitality, and who always keeps a comfortable guest chamber ready for the use of travellers.

The town is beautifully situated at the confluence of the *Oued Abdi* and the *Oued Bou Zaina*.

Mines of Taghit.—Here are mercury mines, which at one time belonged to the late Mr. Wellington Vallance.

El-Bali.—A village on the left bank of the *Oued Abdi*, just under *Djebel Mahmel*, the second highest peak in Algeria.

Oued Taga.—Here is a comfortable borj, formerly belonging to Si Abbas, Kaid of the Aurès, now the property of the State, where the traveller will certainly be able to lodge. Batna may be reached in four hours from this point.

Omm el-Ashera.—A small village near the plain of *Firis*, near which, on *Djebel Kharouba* and *Djebel Bou Driecen*, are great numbers of highly curious megalithic remains, consisting not only of the ordinary type of Dolmen, but of circular tombs of a much more unusual construction.

Timegad, see p. 219.

El-Wadhaha.—This is merely a convenient halting-place prior to the ascent of Chellia; there is no village or habitations, and if the traveller is unprovided with a tent, he must select some other place in which to pass the night.

The ascent of Chellia is quite easy, and can be made from this point in 2½ hours; the traveller can ride to within a few hundred yards of the top. Chellia

is the highest point in Algeria, 7611 feet above the sea, 23 feet higher than Djebel Mahmel, and 69 higher than Djurdjura. The view from the summit is one of exceeding grandeur. The descent may be made by the opposite side of the mountain, and the night's halt at

Bou Hammama, a small village on the edge of the plain of Melagou.

Ain-Meimoun is a lovely spot in an extensive cedar forest. There are both civil and military establishments for sawing timber, and the traveller will have no difficulty in obtaining rough shelter for the night.

Ain-Khenchla, the *Mascula* of the Romans, a large and thriving village, where the traveller will again find himself in a settled part of the country; it possesses a good inn, and there is communication by diligence with Ain-Beida and Batna.¹

92 kil. *El-Biar*.

114 kil. *Ain-Touta*.

122 kil. *Les Tamarins*.

The line now passes into the valley of the *Oued Fedala*. On the left is *Djebel Metlili*, rising above the lower hills; on the right a grand mass of limestone, with upheaved strata, dipping to the S. On the isthmus between the *Oued Ksour*—which presently joins the *Oued Fedala*, right—and the *Oued Fedala* are the ruins of a Roman town, "Ad duo Flumina." ☉

146 kil. *El-Kantara*. The station is 800 mètres from the remarkable gorge in *Djebel Metlili*, in which the hotel is situated. Owing to a tunnel the railway traveller misses the first striking view of the oasis beyond. If he is not pressed for time it is well worth passing a day in this beautiful spot, where alpine scenery and tropical vegetation are met with together in such a wonderful combination; or, if the traveller is staying at Biskra, he may make an excursion here in a day.

El-Kantara was the *Calceus Herculis*

¹ For fuller information regarding the Aurès Mountains, see *Footsteps of Bruce*, p. 61.

of the Romans; and numerous fragments of Roman work and inscriptions have been found. Among others, one showing that a part of the famous Third Augustan Legion was quartered here.

The Roman bridge is at the N. entrance of the defile. It consists of one massive semicircular arch resting upon the rock at either side. It was "restored" in 1862, and all appearance of antiquity removed. The ancient bridge is not now used, the route following the left bank of the stream, instead of the right one adopted by the Romans.

The commencement of the gorge is not more than 200 mètres beyond the hotel. It is a rent in the limestone range, just 40 mètres wide at its narrowest part, and about 300 mètres long. The cliffs that bound it are broken into pinnacles, and the river roars below in a deep bed over rounded boulders. It widens at its S. end; and as the traveller passes out of it a wonderful view is displayed before him. The river emerging from its narrow bed, widens into a goodly stream, and right and left of it is a forest of 15,000 date-palms (of which this is the N. limit), interspersed with orange, mulberry, apricot, and apple trees. Quaint Arab houses emerge from the green sea of foliage, and beyond, over a valley that in spring is green with corn, are some castellated red cliffs, backed by a limestone range.

There are three villages in the oasis; *Dahraouia* on the right bank, *Khekar* and *Kbour-el-Abbas* on the left. They are well built and clean. The houses are usually of one story, with a terrace, on which a tent is often pitched. The woodwork of the doors and roofs is of palm wood. The square towers so frequent in the oasis are for watchers, to guard the fruit when ripe. The inhabitants seem a kindly, unsophisticated race, mostly dark, but some are fair and blue-eyed. They are very industrious. The men work in the gardens, till the fields, or follow a trade. The women weave. They are unveiled, and may be seen washing clothes at the fountain, as unrestrained as if they were in France or England.

The Djebel Metlili dips to the S. Its limestone cliffs are highly charged with quartz. Some of the beds on its S. face are full of fossil shells, as are also the beds of black marl on the right bank of the stream to the N. Bands of gypsum are frequent, especially in the range S. of the Djebel Metlili, which, unlike it, dips to the N. The *moufton*, as the French erroneously call it, or the Barbary sheep (*Ammotragus traagelaphus*), abounds in this district.

There are numerous Roman remains, but none of great consequence, near El-Kantara, one of these, at 7 kil. distance, is called by the natives Kherbel-el-Bordj, the ancient Burgum Speculatorium, built in the reign of Caracalla (217 to 221), by order of Marcus Valerius Senecio, Imperial Legate in Numidia, and under the direction of a prefect of the III. Legion, for the protection of the *speculatores* or outposts of that Legion. An inscription recording this fact was discovered by M. Renier in 1851.

After about 10 kil. the ranges N. and S. approach one another, turning abruptly towards the stream. This is the S. end of the plain of El-Kantara. The S. range terminates in a fine cliff, about 30 mètres high, crowned by a disused semaphore. To the N. is a spur of conglomerate.

165 kil. *Fontaine des Gazelles*, a solitary farm close under a range of low sandhills. A copious warm spring, slightly saline, bursts out of the sand with a temperature of 76° Fahr. at its origin. Its overflow makes a luxuriant marsh, which has formed a small oasis. This is the ancient *Aguas Herculis*. About 2 kil. to the E. is a small hot lake, very pleasant for a bath. Near the spring may be seen a bed of enormous subfossil oysters, some of which are 18 inches in length. These have been drifted here from the bed which lies under the range of hills to the E.

174 kil. *El-Outaïa*. The Arab village is on a low hill to the S., built probably on a Roman site, and of Roman materials. The mud walls rest in places on Roman blocks.

[The *Montagne de Sel* can be conveniently visited from here. An Arab with a mule costs 4 f. It takes about $\frac{3}{4}$ hour to reach the base of the mountain. A few hundred yards from the left bank of the stream are some insignificant Roman ruins. A few rectangular plinths, with the bases of columns hewn out of the same block, remain in position. The mountain, which is one of the five mentioned by Herodotus, is a mass of bluish-gray rock-salt, at the S.W. end of a limestone range, dipping, like the last, N. That it has been forced up from below is evident when any point is reached sufficiently high to see the way in which masses of sand have been torn up out of the plain, and elevated upon pinnacles and mamelons of salt. The strata are a good deal contorted at the point where the eruption took place, and beyond it they have the appearance of having been forced forwards and upwards, and piled together in confusion. The Arabs have used the salt for ages; but it is not quarried regularly.]

The line now strikes S.E. across the plain. To the N. is the fine valley of the Aurès, down which the Oued Abdi flows into the Oued Kantara. The united streams are called the Oued Biskra.

Beyond this cultivation is scanty, and sand predominates. There are usually a good many Arab encampments. Its S. boundary, the Djebel bou-Ghazal, is a limestone range of no great height. In the foreground are bare hills of sand, then a second limestone range, lower than the first; and beyond, the vast plain, stretching with no visible elevation to the horizon, and dotted with dark spots, the largest of which is the oasis of Biskra, 8 kil. distant.

202 kil. **Biskra** (pop. 2874)¹ is situated lat. 34° 52' N., lon. 5° 42' E., at a height of 360 feet above the sea-

¹ A very pleasant work is *Biskra and the Oases and Desert of the Zibans*, by Alfred E. Pease, London, 8vo, pp. 112, from which our plan is borrowed.

level. The name does not denote a single town, but a union of five villages scattered through the oasis, which is a strip of cultivated ground on the right bank of the stream, about 3 m. in length, and from a $\frac{1}{2}$ m. to $\frac{3}{4}$ m. in breadth. The two oases of *Lalia* and *Filiash*, opposite to Biskra, on the left bank, are also considered to belong to it. These villages are all of the ordinary Arab type, houses built of hardened mud, with doors and roof of palm wood. Among the ruins of what the French term "*Le vieux Biskra*," where, before the new fort was built, they fortified the Kasba of the federation existing before their arrival, may be seen a few blocks of Roman work, and one or two Roman columns. This is all that remains of the outpost of *Ad Piscinam*.

The French settlement is confined to the N. end of the oasis, close to the spot where the canal for irrigation, termed "*La Prise d'Eau*," is diverted from the river.

The Fort St. Germain, so called from an officer who was killed at Seriana during the insurrection of the Zaatcha in 1849, is an extensive work, capable of resisting any attack likely to be made against it by Arabs, and of sheltering the civil population, if necessary. It contains barracks, an hospital, and all the other buildings necessary for the use of the garrison. In front of the principal entrance is the *Jardin Public*, an agreeable and shady walk, with the *Church* in the centre. The *Market-place* is worth a visit for the curious nature of the wares exposed for sale, and the picturesqueness of the vendors and buyers.

The street of the *Oulad Nail* is one of the curiosities of Biskra, but it is not a sight to be recommended to English ladies.

The *Negro Village* is worthy of a visit; it is situated just beyond the town, near the Oued Biskra; a negro dance, which can always be managed through any of the guides at the hotels, is a curious spectacle.

The climate of Biskra is delightful during six months in the year. Nowhere in Algeria can one find a more

genial temperature or a clearer sky; but in summer the thermometer frequently stands at 110° Fahr. in the shade, and from 80° to 90° at night. The mean temperature of the year, on an average of ten years, is 73°, the maximum and minimum 124° and 36° during the same time. It is practically rainless, the only drawback is the prevalence of high cold winds.

Mr. Pease, who has probably sojourned here longer than any one else, says: "Biskra must be wooed before she becomes really lovable, and it requires more than a few days' acquaintance with the Queen of the Sahara to discover all her charms. The peculiar virtue of the climate is the pure dryness of the air; except for a few days in the year, not a trace of humidity or dampness is ever perceptible."

Such a climate as this is of immense benefit to many seekers after health, but it is not everything. After a time the desert begins to pall on the invalid; one clump of palm trees and one stretch of sand is very like every other one, and the invalid sighs for the more varied beauties of Algiers, and for all the comforts of life which make the latter so pleasant a residence.

Great efforts have been made to convert Biskra into an important and fashionable winter station; in addition to the excellent hotels previously existing a new one has been built by the Comtesse Le Marrois, sister of Comte Landon, who has done so much for the place. The Royal Hotel would be considered unusually excellent in any country. Near it is a *Casino*, to which another hotel is attached, and even the municipality has deemed it necessary to march with the times, and has constructed a gaudy Mairie in a pseudo-Moorish style, the entrance of which is guarded by terra-cotta lions.

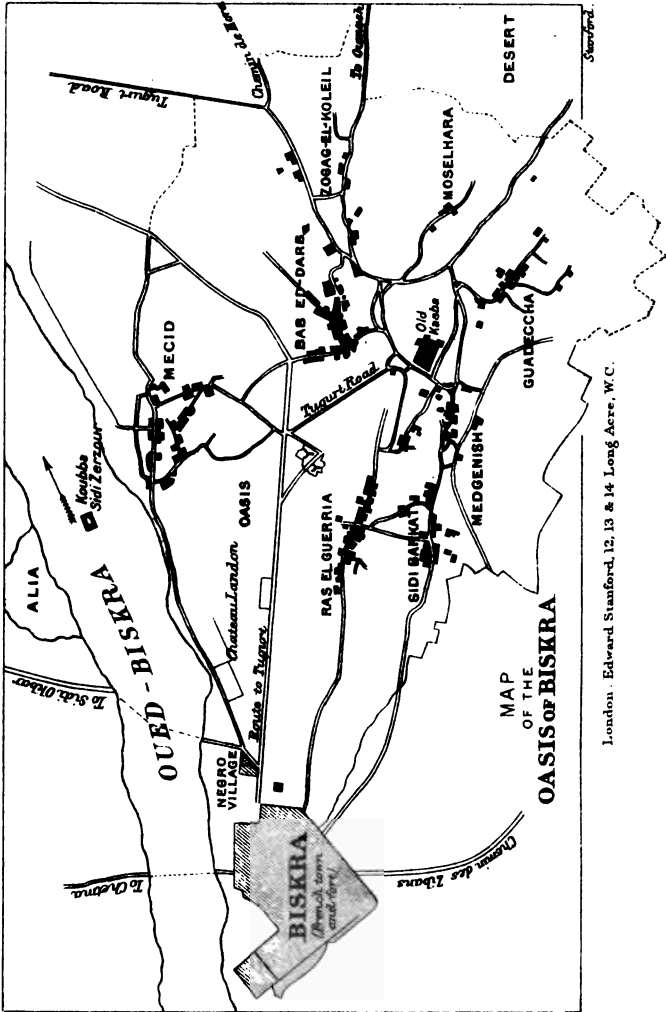
An experimental Government garden was created at Biskra, but owing to the absence of good management, and from insufficiency of funds, it did not prove a success, and has now been converted into the recreation ground and restaurant of *Beni Mora*. This is hardly to be regretted, as the intelli-

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MAP
OF THE
OASIS OF BISKRA

London: Edward Stanford, 12, 13 & 14 Long Acre, W.C.

gent enterprise of a private individual has successfully carried out what the efforts of the State had failed to accomplish. Comte Landon, a French gentleman of fortune, has fixed his winter residence at Biskra, where he has created a charming retreat, and devotes himself to the cultivation of his property, in which he has successfully acclimatised many precious tropical fruit trees and other plants. These gardens can be visited on presentation of an address card.

The oasis of Biskra contains 160,000 date palms, besides several thousand fruit trees of other sorts. The palms are not enclosed within high walls, as at El-Aghouat and El-Kantara, but are planted in detached groups, or as hedges to the fields of barley and gardens of vegetables. The trees are not quite so large as those of El-Aghouat, but the way in which they are planted renders them far more picturesque, and delightful walks or rides may be taken in all directions through and round the oasis.

The supply of water from the Oued Biskra is very copious throughout winter and early spring, nor does it fail entirely even in summer. It has been supplemented by the energy of the French, who have caused Artesian wells to be dug here and in some of the neighbouring oases, so that the most may be made of the ground that is capable of bearing corn.

The sportsman will find valuable information in the pages of Mr. Pease's book, but the general traveller will find it rather too hard work pursuing the Barbary sheep in the rocky mountain ranges around Biskra.

About 6 kil. N.W., under the Djebel bou-Ghazal, is the **Fontaine Chaude**—Ar. *Hammam es-Salahin*—i.e. "Bath of the Saints." It bursts out with great violence and volume, giving, it is said, 40 litres per second. Its temperature at its source is 112° Fahr. Baths have been erected round it, much frequented by French and natives. These are (1895) being rebuilt. A tramway now starts from the Hotel Victoria to the baths several times a day. The surplus water is first col-

lected in a reservoir outside, where poor Arabs bathe, and thence flows down the hill into a marsh, turning two or three Arab mills as it goes. In the stream, close to the marsh, are quantities of small fish, *Cyprinodon calaritanus*, identical with those found in the hot springs of the oasis of Jupiter-Ammon in Egypt. The temperature of the water in which they live is about 96° Fahr. There are two small lakes of warm water near the *Fontaine*, and just behind it is a low hill of a formation that appears to be volcanic.

Biskra is the capital of the *Ziban* (plural of *Zab*), whose prosperous villages, buried in groves of palm and fruit trees, and surrounded by barley fields, are dotted over the vast plain extending from the foot of the Aurès to the *Chott Melghigh*.

Excursions may be made in various directions to the different oases, one of which at least should be visited. We proceed to describe that of **Sidi Okba**, 20 kil. S.E. The road is practicable for a light carriage, and the drive occupies two hours. Crossing the Oued Biskra, here a stony tract, a quarter of a mile broad, with a deep stream flowing in the centre, the small oasis of Filiah is passed on the right, and the plain, here sparingly cultivated, is entered. In the distance is seen the long low line of the palms in the oasis of Sidi Okba. To the left are fine views of the Aurès, with the oases lying at the feet of their spurs. These occur in the following order from Biskra:—Chetma, 8 kil.; Droh, 13 kil.; Sidi-Khelil, 14 kil.; Seriana, 17 kil.; Garta, 21 kil. After a drive of two hours the village of Sidi Okba is reached, composed, like all others, of houses of one story, built of sun-dried bricks. The marketplace and the small shops are extremely quaint and curious. But the chief interest of the place is centred in the mosque, probably the most ancient Mohammedan building in Africa. It is square, each side about 35 mètres long, with a flat roof supported on a number of rude columns, one of which, with a spiral ornament

round it, may possibly have been brought from a Roman building. The rest are extremely rude imitations, in clay, of stone pillars. At the N.W. corner is the shrine of Sidi Okba, in a sort of chantry screened off from the mosque. It is a tomb of the ordinary Marabout type, hung round with silk, ostrich eggs, and other pieces of tawdry furniture, among which a large gilt mirror frame is conspicuous. On the S. side of the mosque is the pulpit. The minaret should be ascended for the sake of the view. There is an Arab legend that this minaret will tremble visibly when Sidi Okba is invoked according to a prescribed form of words. There is a carved wooden door on the E. side of the mosque of admirable workmanship, and on one of the pillars a rude inscription in early Cufic characters, perhaps the oldest Arabic inscription in the world, and very grand in its simplicity—*This is the tomb of Okba, son of Nafa. May God have mercy upon him.*

Sidi Okba is the religious, as Biskra may be styled the political, capital of the Ziban. It derives its name from the illustrious warrior who, at the head of a small body of Arab horsemen, went forth at the bidding of the Khalifa Moaouia to conquer Africa in the sixtieth year of the Hejira. What Rome had taken centuries to effect Okba accomplished in a marvellously short time; and when he had extended his conquest from Egypt to Tangier, he spurred his horse into the Atlantic and declared that only such a barrier could prevent him from forcing every nation beyond it who knew not God to worship Him only or die. Many revolts took place before the power of the conqueror was consolidated, and in one of them—at Tehouda, about 700 mètres from the oasis of Sidi Okba, in A.D. 682 (A.H. 63)—he, with about 300 of his followers, was massacred by a Berber chief of the name of Kocella, whom he had subjected to great indignity. When, later, the Arabs had reconquered the country in which Biskra now stands, they buried their leader at the place which bears his name.

A visit to the oasis of **Oumach** gives the traveller an opportunity of seeing a specimen of the *dunes* of sand, so characteristic of the desert.

Chetma is within a drive of one hour, and is worthy of a visit. The houses are on a somewhat larger scale than those at Sidi Okba or Biskra.

Carriages can be hired at a very moderate rate; for drives to old Biskra, Cora, La Fontaine Chaude, and the Col de Sfa, the tariff is 2·50 f. per hour. For other excursions the rate is as follows:—

To Chetma	10 f.
„ Sidi Okba	20 f.
„ Droh	20 f.
„ Oumach	20 f.
„ Sources d'Oumach	12 f.
„ The Dunes	10 f.
„ Saâda	25 f.

ROUTE 15.

Biskra to Tuggurt.

As we have already observed, desert-travelling does not come within the scope of this work. Still, as so many of our countrymen now come to Biskra, we are tempted to make an exception in favour of Tuggurt.

It can be done on horseback in four days; but as there is only one place on the road where the traveller can sleep with anything like comfort, he had better hire a light waggonette, which, with three horses, ought not to cost more than 400 f. or 450 f. for the trip; or he may go in the public conveyance which runs twice a week, on uncertain days.

After leaving Biskra, the road leads for about an hour through palm groves and then emerges into a slightly undulating plain covered with a thick scrub of terebinth, as high as the heads of the goats which browse amongst it.

28 kil. *Sâada*. The character of the country does not change much before reaching this place, which is a fortified caravanserai with rooms for

travellers, but no provisions of any kind can be obtained.

51 kil. *Aïn-Chegga*. Bifurcation of the route to the Souf. A caravanserai inferior to the last, offering only the protection of its roof to travellers. After leaving it the country is bare and uninteresting, closely covered with thick scrub. Soon a view is obtained of a great plain, that of the *Oued Gheir* stretching away to the S., and then of the lake called *Chott Melgigh*, 300 kil. long. The route now follows the course of the *Oued Gheir*, whose length is 100 kil., and along which there is a chain of smaller chotts, which it connects with the *Chott Melgigh*. During the next 16 kil. palm oases are more or less frequently met with, and at *Kef el-Akhdar* (the green mound) is an Artesian well of brackish water.

104 kil. *Maghaier*, a village of sun-dried bricks, surrounded by a mud wall, situate at one side of a large oasis containing 50,000 date palms. The Borj here is occupied by a Frenchman and his wife who provide meals and sleeping accommodation of a simple character, and who will furnish mules and guides for the ascent or exploration of the mountain called *Djebel el-Melah*, which is said to contain numerous caves and shafts of great extent and depth.

131 kil. The Artesian well of *Meza Berzig*; beyond it the track is long and sandy, skirting three or four oases, amongst them *Ourlana*, with its celebrated Artesian well.

159 kil. *Tamerina*, a village apparently of greater importance than *Maghaier*, built like it of mud, but on a conspicuous mound within it stands the ruin of a building of cut stone, circular in plan, composed of a continuous arcade of horse-shoe arches; on the outskirts of the village is a caravanserai, worse even than the others.

176 kil. The road skirts the fine oasis of *Sidi Rachid*, which is often selected as a resting-place, but a more convenient one is

189 kil. *Gamerha*, a large oasis on the right of the road, four hours' ride from *Tamerina*. Here is a clear and

rapid stream of nearly sweet water. Soon after leaving this place one gets a glimpse of *Tuggurt* on a distant hill; between the two places, however, one passes neither oasis nor water—nothing but sand the whole way. It is sometimes disposed in steep ridges about 20 feet high, so loose that it has to be passed with the greatest care, to avoid the burial, more or less complete, of carriage and horses.

204 kil. *Tuggurt* stands out an imposing and conspicuous object on the brow of a hill, with its domes and towers in bright relief against the magnificent mass of palm trees behind them.

The approach of strangers is a rare event; and, in the crowds which gather round the gate, in their freedom and vivacity of gesture, in the brightness of their costume and the deeper hue of their faces, the traveller will obtain a most interesting picture of *Oued Gheir* society.

On passing the gate, the traveller sees an irregular market-place situated on an ascent. On the right is a long line of arcades, on the left is the wall of the *Kasba*, which is surmounted by a large dome; in front is the chief mosque, with its dome and minaret; near it is another minaret of a ruined mosque.

Tuggurt covers a space, whose longest diameter is 400 mètres, on a slope inclining to the S.E. It was once surmounted by a ditch or moat, which is now filled up. The houses nearest the line of the old moat all join each other, and, after the manner of the *Oued Gheir* villages, form a continuous fence or wall, interrupted only by the town gates, of which there are two.

The town is divided into quarters, respectively occupied by the citizens proper, the *Beni Mansour*, the Jew converts to Islam, the negroes, and the foreigners. Besides these there are other divisions.

The houses are, for the most part, built of sun-dried bricks, but are sometimes decorated with burnt bricks, disposed in a manner to resemble tracery. They rarely rise a story above the ground floor. The streets are narrow and winding.

There are in all twenty mosques. Of these the two already mentioned are of much more importance than the rest. One of the two is now used as a carpenter's shop. The other, whose cupola dominates the market-place, is in bad repair, but possesses some very fine plaster arabesque work, the design of a Tunisian architect. From the minaret of the first mentioned of the two mosques a very fine panoramic view of the surrounding desert and oasis, including that of Temacin with its mosque, may be obtained.

On entering Tuggurt by the Biskra gate, the traveller, to reach the entrance of the Kasba, has to pass the entire length of its wall, already mentioned as bounding the market-place on the left. The Kasba consists of many courts. Its outermost court is nearly as large as the market-place, and, like it, is furnished with arcades on one side. The commandant's residence, the barracks, and the hospital, are all within the *enceinte* of the Kasba. It is built of dressed stone—a rare distinction in the Oued Gheir—and contains some rooms of fair dimensions. In one of its inner courts is a delightful garden, through which runs a stream of water from an Artesian well within it. There are three such wells in Tuggurt.

There are hardly any French residents. The garrison is entirely native, and the population is about 7000.

The oasis of Tuggurt contains 190,000 palm trees. Shady lanes, beside streams of water, lead through the groves. Under the palms are gardens in which grow luxuriantly fruit trees, corn, and vegetables.

Marshes and salt lakes cover a large area near Tuggurt. The abundance of water here and throughout the Oued Gheir is the cause of a malignant fever at the end of April, and again early in the autumn, frequently fatal to Europeans, whilst the purgative nature of the water is a fertile source of diarrhoea and other similar complaints.

After the insurrection of 1871 the Government established a regular military post at Tuggurt, but after the capture of Bou Choucha, in 1874, this

was abolished, and part of the surrounding tribes were placed in the circle of Biskra, and part in that of El-Aghouat.

Tuggurt has two suburbs, one to the S. among the marshes, and one to the N.E. on a hill. The *Compagnie de l'Oued Rirh* possesses a house and a small piece of land here.

From Tuggurt an excursion may be made to Temacin, an oasis about 20 kil. to the S.W. About half-way, but a little to the left of the direct road, is a lake of salt water, the margin of which is thickly fringed with tamarisks, rushes, etc.; it abounds with water-fowl. Nearer Temacin is another and larger one, connected with the stagnant moats surrounding the walls of the town. In these occur great quantities of *Chromida*, the only true African fish found in Algeria, and which are found as far as the E. coast of the continent.

Temacin is a large town, forlorn, neglected, and ruinous, covering a gently rising mound, and surrounded by a wall and stagnant moat. This, with its rude bridge, the arched gateway, the successive tiers of houses, as they rise in terraced ruin to the crest of the mound, combine to give to it a strange and weird dignity, in good keeping with its position as outpost at the desert end of the Oued Gheir. After passing through the winding and narrow streets of the town a central square or place is reached, in which is the Kaid's house. Like all its neighbours it is of sun-dried brick, and of the heaviest and rudest construction.

At about 2 kil. to the S.E. is another village, containing the Zaouia of a celebrated Marabout, whose descendant still lives here. The streets are comparatively clean and well kept, affording a marked contrast to those of Temacin. The tomb-mosque adjoins the house of the Marabout. The part containing the tomb, though erected only ten or twelve years ago by a builder from Tunis, has already the appearance of antiquity. The arabesque work on the interior of the dome is good, but inferior to that at Tuggurt. Iron and

glass gates of rude design, but highly prized here, separate the shrine from the main body of the mosque devoted to ordinary religious service.

We cannot leave the desert without a few words on the immense benefits which the French have conferred upon it by the sinking of Artesian wells.

In 1856 many of the oases in the desert had become uninhabitable by the filling up of existing wells, the number of gardens diminished daily, and the population began to emigrate to less desolate parts of the country. Government wisely determined not to clear out existing wells, always a difficult and even dangerous operation, but rather to dig new ones by means of Artesian boring apparatus.

The first attempt was made at Tugurt in 1856; after five weeks of labour the water-field was tapped at a depth of 60 mètres from the surface, and almost immediately afterwards a river rushed forth yielding 4000 litres a minute, double the quantity afforded by the well of Grenelle at Paris. The joy and gratitude of the inhabitants can well be understood, and manifested itself by singing, dancing, and *fantasias* of every description.

Ever since similar scenes have been taking place, not perhaps with the same amount of astonishment, but with no less rejoicing.

A branch railway leaves the main line from Bône to Tunis at Souk-Ahras, and the journey can be made thence in seven hours.

After leaving Souk-Ahras the line follows the course of the Medjerda for a distance of 7 kil. till the junction of that river with the *Oued Mungoub*; it crosses the latter and runs through a picturesque and wooded valley as far as 14 kil., *Oued Chouk*, the valley of spines or thistles; this is a watering station.

28 kil. *Dréa*. The station is badly named, being remote from the locality whose name it bears; it is better known to the Arabs as *Sidi Brahim*, from a Marabout close to the station. On the high table-land to the E. is the village of *Zarouria*, 12 kil. in a direct line from Souk-Ahras. From this station the ruins of Mdaourouch are only 5 kil. distant, but neither from this nor from the next station is there a carriage road. At the ruins there is no place to sleep save the Kaid's house. On the line one cannot sleep save at the waiting-room of the stations.

36 kil. *Mdaourouch*. An important dépôt for Alfa. 12 kil. to the W. are the ruins of the ancient *Madaura*, where St. Augustine commenced his studies, and the birthplace of Apuleius (see p. 244).

63 kil. The line crosses the *Oued Mellegue*, up the valley of which it has been running (p. 243).

68 kil. *Claire Fontaine*, the native name of which is *Aiwemat-ed-Diab* (see p. 243).

74 kil. Junction of the *Oued Mellegue* and the *Meskiana*. Before this the former river is named *Oued Chabro*. The ground being full of magnesia the water is quite bitter.

96 kil. *Morsott*, seat of a *commune mixte*, to which the phosphate quarries belong. Numerous Roman remains in the neighbourhood; one tower may be seen to the left close to the station.

118 kil. On the right is a hill, abrupt towards one side and sloping on the other, called by the Arabs *Bel Keff*, and by Europeans "the Gen-darme's cap."

128 kil. **Tebessa** (pop. 2599), 2950 feet above the sea.

ROUTE 16.

To Tebessa.

Distance in Kil. from S. A.	Names of Stations.	Distance in Kil. from Tebessa.
..	Souk-Ahras	128
14	Oued Chouk	114
28	Dréa	100
86	Mdaourouch	92
68	Claire Fontaine . . .	60
96	Morsott	32
128	Tebessa . . . . .	..

We have no certain information as to the date of the first foundation of Tebessa; neither Strabo nor Pliny make mention of it, and its name appears for the first time in Ptolemy. It is not probable, therefore, that its existence as a Roman station could have preceded the reign of Vespasian (70-79). Situated on the high plateaux which command both the Sahara and the Tell, its position, from a strategic point of view, was the most advantageous which it is possible to conceive. In the reign of Hadrian (123) the imperial government thought it advisable to connect it with Carthage by a great highway, which work was carried out by the III. Legion Augusta, under the direction of Metilius Secundus, lieutenant of the emperor; the record of this work still exists:—

IMP. CAESAR
 DIVI. NERVAE. NEPOS
 DIVI. TRAJANI. PARTHICI. F
 TRAIANVS. HADRIANVS
 AVG. PONT. MAX. TRIB.
 POT. VII COS. III
 VIAM. A. GARTHAGINE
 THEVESTEN. STRAVIT.
 PER. LEG. III. AVG.
 P. METILIO. SECVNDO
 LEG. AVG. PR. PR.

Another inscription gives the exact distance, 191 miles 700 paces. It formed also the junction of the roads to Cirta, Hippone, Lambessa, and Tacape (mod. Gabes). It was probably also an *entrepôt* for the commerce of Central Africa as well as for the produce of the country.

Christianity was introduced into Carthage about A.D. 150, and Theveste was probably one of the first places to follow the example of the African metropolis. Four bishops are recorded as having ruled over the church here, of whom the first assisted at the council of Carthage, presided over by St. Cyprian. Their names are:—

Lucius . . .	A.D. 255
Romulus . . .	„ 349
Urbicus . . .	„ 411
Felix . . .	„ 484

St. Maximilian and St. Crispin suffered martyrdom here, the former under the proconsulate of Dion, the latter under Diocletian. St. Optat records that a Donatist council assembled at Theveste in A.D. 350.

In 428 and 429 Hippone was besieged by the Vandals, and it was during this period that St. Augustine died. The Count Boniface subsequently signed a treaty abandoning to the Vandals the three Mauretania and Numidia W. of the Ampsagas (mod. Oued el-Kebir). In 443 a second treaty was concluded at Carthage between Genseric and Valentinian, by which the Vandal king restored to the Emperor of the West the three Mauretania and Western Numidia in exchange for Eastern Numidia and other provinces, and from this moment Theveste became part of the Vandal kingdom.

It soon fell into insignificance and disappeared from history until restored by the Byzantine armies. Solomon, successor of Belisarius, was the second founder of Theveste, which he fortified, as he did other cities in Mons Aurasius (Aurès) and elsewhere, and enclosed it within ramparts and towers, the tracing of which exists to the present day; the citadel, containing the modern town, is as imposing in appearance as when built thirteen centuries ago.

A very interesting inscription in one of the openings of the triumphal arch records this fact, and is the only one hitherto found in Algeria making any allusion to the Vandals—

† Noto divino felicissimis temporibus
 plisimorum dominorum
 nostrorum Justiniani et Theodorae
 Augustorum post abscisos ex Africa
 Vandalos extinctamque per Solomonem
 gloriosissimo magistro militum ex
 consulte Praefecto Libyae ac patricio
 universam Maurusiam gentem
 providentia ejusdem aeminentissimi
 viri Theveste civitatis a fundamentis
 aedificata est.

Belisarius had hardly quitted Africa when insurrection broke out in the south. Solomon resisted bravely for four years, but was killed before the walls of Tebessa in 543 A.D., after which the history of the place is en-

veloped in obscurity during the time that it formed part of the Eastern empire.

Then came the Arab invasion under Okba bin Nafa, and Abdulla bin Jaffer, which destroyed the last trace of Greek supremacy, and converted Mauretania and Numidia to the religion of El-Islam. During the Mohammedan domination Tebessa partook of the vicissitudes of the dynasties which at various times held the district, and finally submitted to a French column under General Randon in 1842, although it was not until 1851 that it was permanently occupied.

Tebessa is situated at about 18 kil. from the Tunisian frontier, north of the mountains of Bou Rouman, which enclose the basin of the Oued Chabro, an affluent of the Oued Meskiana. It has an abundant water supply, and is surrounded by beautiful gardens. In front is an extensive plain watered by numerous streams flowing into the Oued Chabro, which winds along the bottom of the valley.

The modern town is contained within the walls of the ancient Byzantine citadel, which, however, occupies but a small portion of the ancient city. Its high walls flanked with towers are still in a tolerably good state of preservation, and are evidently built of still older materials.

It is almost square in form, the perimeter being about 1070 mètres in extent. The walls are built of large cut stones, and it is strengthened by fourteen square towers, of which four are at the angles, and the rest irregularly distributed between them. The height of the wall varies from 5 to 10 mètres; that of the towers from 10 to 12, and the thickness of the masonry from 2 to 2.50. It has three gates, the *Bab el-Kedim*, or old gate, the *Bab el-Jedid*, or new gate, and the *Bab el-Kasba*, or gate of the citadel, which forms the entrance to the new quarter occupied by the troops. The first of these is also called the gate of Solomon; the second is formed by the arch of Caracalla.

The whole country round is covered

with Roman remains, proving not only the great extent of Roman colonisation, but the high state of civilisation that prevailed under their rule, neither of which are at all likely to be approached in modern days. Amongst the ancient monuments in and around the town itself are—

The tetrastyle **Temple of Jupiter** usually but erroneously called **Temple of Minerva**, owing to the eagles on the entablature being mistaken for owls. It is situated within the present *enceinte*, and is of the Corinthian order, 14 mètres long, including the pronaos, by 8 mètres broad. The material of the main building is compact limestone. Each side is strengthened by four pilasters, and in front is the portico supported by six monolithic columns of cippolino, four of which are in front. It is raised on a basement or podium 3.66 mètres high, in which are three vaults now filled up, and access to the temple is attained by a handsome flight of cut stone steps.

The entablature is not of a regular form, the architrave and frieze forming one height; over the columns and pilasters are panels ornamented by *bucranes* or ox skulls. The intermediate spaces are occupied by panels highly sculptured. This is immediately crowned by the cornice, above which is a highly ornamented attic, now about equal in height to the entablature. No doubt it had a cornice, if it was ever finished, but if so, it has disappeared. In the panels between the *bucranes* are eagles holding thunderbolts, on either side of which are serpents and branches with trilobate leaves. On the attic, the vertical panels over the columns and pilasters have trophies of armour, and the oblong ones alternately garlands and double horns of plenty.

The attic on the front has no sculpture, and this was doubtless intended to receive marble slabs with a dedicatory inscription. The soffits between the columns are everywhere richly decorated, and between the two central columns is the head of Jupiter

Tonans. It was originally surrounded by an enclosure wall, the gate of which now actually serves as the front door of the mosque opposite.

This building has been put to many uses since the French occupation; at first it was a soap manufactory, then the *Bureau du Génie*, subsequently a prison, and a canteen; then it was converted into the parish church, with ecclesiastical fittings in the worst style of the *génie militaire*. The hideous modern additions have now been removed, and the temple restored to its original beauty. At the present time it is used by M. Delapart, the Curé of Tebessa, a most enthusiastic antiquary, and beloved by all classes of the community, as a museum for many valuable antiquities which he has collected in the Basilica and elsewhere.

On the walls have been placed some fine mosaics, belonging probably to public baths. One of the subjects represents Amphitrite surrounded by Nereides; another represents a vessel laden with large amphoræ and the inscription *Fortuna redux*. The most curious is a sort of game, with compartments in which are represented animals such as a bull, an ostrich, a gazelle, a wild boar, each having numbers attached, as in the cups of a bagatelle board; probably leaden quoits were thrown into these.

The triumphal Arch of Caracalla is a really magnificent monument of the description called *quadrifrons*, each face representing an ordinary single arch of triumph. The only other known specimens of the kind are the arch of Janus Quadrifrons, at Rome, much inferior to this both in size and beauty, and the great arch at Tripoli in Africa, which is a much finer building. There is also an imperial medal in existence containing a similar arch, dedicated to Domitian. This monument is built of large blocks of cut stone. A pair of Corinthian monolithic disengaged columns flank each arch, behind which are pilasters. Each column stands upon its own

case in African monuments, upon one common to each pair of columns.

The soffits supported by these, and also the central ceiling, were richly decorated. The entablature is composed of a highly ornate architrave, with rounded leaves at the angles, above which is a cornice. There is also a lofty frieze, as though for the reception of an inscription, and this also is surmounted by a cornice.

Above the N. façade is a small building, intended as a niche to contain a bust or statue; the semicircular base is still in place. It is fronted by two isolated columns, with corresponding pilasters on the right and left of the niche. The whole is covered with a flat roof, with a plain architrave and cornice on the outside. Another was probably built on the S. side; indeed, but for the inscription on the inside, one would be tempted to believe that there must have been one above each façade. The head of a bust, evidently belonging to this niche, and supposed to be that of Septimius Severus, was found in the neighbourhood, and was taken to the Engineers' office in the Palace at Constantine. The body of this statue is in the museum here.

From the inscriptions on the interior we learn the history of the building. There was a rich family of Tebessa represented by three brothers, Cornelius Fortunatus, Cornelius Quintus, and Cornelius Egrilianus. The last of these commanded the 14th Legion, Gemina, and died leaving all his property to his two brothers on certain conditions. The first was that they should erect a triumphal arch surmounted by two tetrastyles, enclosing statues of the two Augusti. In the Forum also were to be placed statues of the divine Severus and of the goddess Minerva. 250,000 sesterces were to be expended on these works. A further sum of 250,000 sesterces was to be devoted to affording gratuitous baths to the inhabitants in the public *thermæ*, and lastly 170 lbs. of silver and 14 lbs. of gold were to be deposited in the Capitol for a purpose which is not clear from the inscrip-

tion. The days available for public baths are recorded in another inscription, on the opposite side of the arch.

On each façade, above the arch, was a tablet containing a dedicatory inscription. The western one was in honour of Julia Domna, wife of the Emperor Septimius Severus, and mother of the two Emperors Caracalla and Geta.

The key of the arch below is decorated with an eagle holding thunderbolts, supporting a medallion, out of which rises a female bust, wearing a high mural crown, typical, perhaps, of Julia Domna herself or of Rome.

Septimius Severus died in A. D. 211, and the two Augusti mentioned in the Testament were evidently Caracalla and Geta. Caracalla murdered his brother in 212, consequently the date of the Testament is fixed between those two years, though the execution of the work may have been a little later. The east façade bears a dedication to Septimius Severus himself. It has a medallion similar to that on the W. front, of a warrior in armour, resting on a head of the Medusa, representing probably Septimius Severus himself, and the terror which his countenance was supposed to inspire. It runs as follows:—

DIVO. PIO. SEVERO. PATRI
IMP. CAES. M. AVRELI. SEVERI. ANTONINI.
FIL. FELICIS. AVG. ARAB. ADIAB. PARTH. MAX.
BRIT.
MAX. GERM. MAX. PONT. MAX. TRIB. POT. XVII.
IMP. II.
COS. IIII. PROCOS. P. P.

The southern inscription is illegible; it is believed to have been in honour of Caracalla; and the northern one is wanting, and, if ever executed at all, was probably in honour of Geta to complete the series. The two other medallions are obliterated.

The partial destruction of this arch may date from the 5th century, when the city was deserted by its inhabitants and sacked by the Numidians; but its preservation at all was undoubtedly due to Solomon having so traced the walls of the citadel as to adopt it as the principal entrance gate.

One of the noblest monuments in

Algeria is the great **Basilica** of Theveste, with its recently discovered **Forum**, subsequently converted into a Christian **Monastery**, situated about 600 mètres N. E. of the modern town. The latter portion was excavated in 1888-91 by the *Service des Beaux Arts* under M. Sarazin, and it was not till then that the true character of this important monument was suspected.

The first named was evidently a basilica, properly so called, pretty much as Vitruvius describes it, with a nave and two aisles, the farther end being provided with a semicircular apse where the prætor and his assessors sat. The masonry throughout is of immense blocks of stone carefully cut and adjusted, almost without the use of mortar. It bears unmistakable evidence of having been constructed at various epochs. The best parts of it can hardly be of a later date than the first or second century after Christ.

What remains of the Forum is also of admirable construction; but when the Basilica became a Christian cathedral about the end of the 4th or beginning of the 5th century, its character was to a great extent destroyed, and it was converted into a monastery. As such it must have existed during the reign of the Vandals (439-584); it was probably destroyed with the rest of the city in 534, and restored when Solomon rebuilt the latter. Though the monastery shows none of the architectural splendour of the more ancient buildings, it is of the greatest possible interest as being the oldest known example of the ancient *Monasteria clericorum*.

The entire premises were surrounded by the Byzantines with walls, flanked by two towers on the eastern side, salient only in the interior.

Entrance is obtained by a monumental gateway, still in great part preserved. It was of simple but elegant construction; the exterior face was decorated with two columns on each side, placed on stylobates, still entire; the interior façade was less ornate.

Beyond this is a wide avenue, separating the Forum from the Basi-

lica; it is curious to notice the mason's marks on the large flat stones with which it is paved. There can be little doubt of the original destination of this portion of the construction; the Basilica was invariably an adjunct of the Forum; these two buildings were the two principal centres of Roman life, where all matters regarding politics and business were discussed, where speeches were delivered, and where disputes were settled. A good instance of this may be seen at Timegad, and here as there the Forum was in a great measure uncovered. At the end of this paved avenue were extensive stables, built in the most massive manner; the mangers are still entire, and holes may be seen in the walls to which the animals were attached. On the right are stables of better construction, evidently intended for horses of a superior kind.

Between these and the great entrance stair of the Basilica, and on each side of it, was a covered portico abutting on a tower, evidently intended as a promenade during bad weather. Opposite to this is the Forum. It was probably much modified in Christian times; the central court may have been turned into a garden or cemetery, through which ran two paved roads at right angles to each other. On the N. side was a covered cloister, on the E. and W. were raised uncovered walks, to which access was obtained by large flights of steps. The S. side had only a balustrade, consisting of short pillars, between which were inserted slabs of stone.

We may now enter the Basilica: the access is by a flight of thirteen steps of unequal width, the greater number of which are destroyed, leading into the peristyle by three doors, a large one in the middle and a smaller one on each side. This court must have been most imposing. It was surrounded by an arcade, each side supported by four columns, between which were pedestals, probably destined for statues; the central portion was open to the sky, and in it was an elevated basin or fountain, the whole

resembling very much in design the court of a Moorish house of the present day. The fountain was at first no doubt purely ornamental in its character. It was subsequently used for the ablutions of the faithful before prayer, a custom which the Mohammedans adopted, but which now only survives in the Christian churches in the ceremony of dipping the fingers in holy water before entering a church.

From the right or east wall of the arcade a door leads into the baptistery, the font used for immersion is still visible.

Beyond this comes the main body of the building, entered by three doors. It consisted of a nave with apsidal end and two aisles. The nave and aisles were separated by piers and engaged shafts in two superimposed orders, the whole being arcaded, and the aisles having a gallery. The walls were built of fine white limestone; the columns are of gray granite, white marble, and blue cipolino, the last probably of Greek origin. Many of the columns are broken; the bases are all in their original position.

It is easy to recognise the period of the Pagan Emperors; a later epoch, with a certain amount of Christian art; and ultimately a period of absolute decadence, probably the last time that Christians worked in this country. The first is marked by Corinthian columns, the capitals of which are in the most correct form, and the shafts of polished marble and granite, and of a beauty which would only have been marred by fluting. The second is represented by fragments of fluted and spiral columns, the capitals of which were richly decorated with foliage; and lastly, there are rough productions in stone, out of all keeping with the rest of the building, the capitals of which bear grotesque representations of fishes, perhaps used as the symbol of Christ.

Many of these last have now been removed to the museum and church.

The apse is raised above the level of the nave, with three steps on which to mount to it. On either side is a square chamber, corresponding to the termi-

nation of the aisles. From the first to the fourth pillars on each side, and again across from the fourth on one side to the fourth on the other, are grooves to receive a railing, showing that this part was divided off with the apse to form, at first the prætor's court, and subsequently the sacrarium; in the centre of this space is an oblong vault or cavity. The whole of the floor is covered with tessellated pavements of very elegant designs and admirable execution. These are almost perfect in condition, and have been judiciously covered over with a layer of earth to protect them from injury.

Descending from the east side aisle by a flight of about thirteen steps is a chapel of the form of a trefoil inscribed within a square.

From the north and south apses are communications with small lateral chambers right and left, and from the south one there is access through a small anteroom to a sepulchral chamber beyond; the front of each apse was arched, the arches supported on each side by columns of green cippolino.

In the centre of the square contained between them was what appears to be the foundation of an altar; the walls were covered, for a part at least of their height, with a mosaic of the richest marbles, porphyry, and serpentine, so disposed as to form either pictorial designs or geometric patterns, while the ceiling was a mosaic of glass, quantities of tesserae, both coloured and gilt, having been found amongst the *débris*. The floor also was mosaic.

This building was probably an addition, subsequent to the erection of the main body of the basilica. It is also certain that it must have replaced a still older structure, as traces of tessellated pavement were found 4 feet below the actual floor.

A large sarcophagus of marble, with Christian figures rudely sculptured, was found at the bottom of the stairs, and now forms the high altar in the parish church.

In the sepulchral chamber above mentioned was found a tessellated pavement, containing four inscriptions recording the interment of individuals

beneath them. One is that of Palladius, Bishop of Idicra, near Cirta (Constantine), who died here on his return from the Council of Carthage, under Huneric, in 484. This inscription was headed by a cross, having in the lower right-hand angle the letter *Omega*. It is curious to observe that the corresponding one on the left hand does not contain the *Alpha*, as is usually the case. It has been said that this was owing to the fact of the bishop having died out of his own diocese. Perhaps it was to throw doubt on the deceased bishop's orthodoxy, as he may have joined the Arian heresy. The tomb was opened, thus destroying the inscription, but the bishop's skeleton was found perfectly preserved after fourteen centuries. It rested on a bed of laurel leaves, and its brown hair was undecayed. These venerable remains are preserved in the church of Tebessa.

Another tomb was opened, that of Marcella, and in it were found perfectly preserved bones and light hair. The inscription was also necessarily destroyed, but the others (three in number) were allowed to remain intact.

From a careful study of the architecture of this building, however, the grand simplicity of its design, and the richness of its materials, it is difficult to believe that the earlier portions of it could have been built after the introduction of Christianity into Theveste, when art was already in its decadence. The presumption is strong that it could not have been commenced later than the end of the 1st or beginning of the 2nd century; this would make it older than almost any of the Roman monuments of Algeria, as it certainly was superior to most of them in elegance and simplicity, though less florid in decoration.

If we descend from the basilica and turn to the left we find a series of booths or cells encircling the outer walls of the original buildings. Those on the N. side especially were evidently shops with which all such buildings were surrounded; traces may be seen of where joists were inserted to convert the whole or a part of each room into two stories. Those

on the S. side were clearly built or adapted so as to serve as cells for ecclesiastics; here we see rooms of more imposing dimensions, perhaps the residence of the bishop, and an oratory which may have been the private chapel of the monks.

The masonry here is of a much more slovenly character; it is always of large cut stone, perhaps taken from some part of the Forum, but when the architect wished to use these in a transverse direction, he did not take the trouble to adapt them to the thickness of his wall, but allowed the ends to project within the chambers. The stones also are built up against the wall of the basilica, never dovetailed into it.

The N.E. corner of the *enceinte* has not yet (1895) been excavated.

A new *Church* has been built by the good Curé Delapart, which is itself quite a museum. Many fragments of Christian architecture have been worked up into the building. One of them is of exceptional interest, being a small panel of glass mosaic, supposed to be that made to record the consecration of the basilica. The altar even has been brought from that building.

Roman Aqueduct of Ain-el-Bled. The spring of *Ain-el-Bled*, which affords 2000 litres of water per minute, furnishes the town with water, and irrigates the gardens to the N. and E. It is brought to the town in a massive Roman aqueduct, 900 mètres long, passing over a bridge of the same period. There is a second Roman aqueduct, that of *Ain-Chela*.

Within the town is a Roman house still used as a habitation. It is of great size, and was probably the palace of some important personage. Half of it is buried under the soil, and the absence of all exterior openings of the same date as its erection, except the entrance, now bricked up, induces the belief that it had an interior court.

Outside the gate of Solomon, on the

verge of the ravine which divided ancient Theveste into two equal parts, are the remains of a theatre, now entirely overgrown with grass, and of no particular interest. It was about 52 mètres in diameter, and nearly circular in form.

What cannot fail to strike the traveller with astonishment is the enormous amount of beautifully cut stones, of great size, lying about in every direction; not only are the Byzantine fortifications, the modern French Kasba, and half the houses in the town, built of them, but even the garden enclosures around, and the ground is full of them wherever excavations are made.

About 600 mètres to the south of the town is the Marabout or *Zaouia* of Sidi-Abd-er-Rahman, who is supposed to have founded it.

There are many other Roman ruins of interest in the circle of Tebessa, and on Djebel Mistiri, west of the town, and extending as far as Djebel Youkous, are a number of megalithic tombs of a circular form. They are about 100 in number, situated in a single line, the right of which rests on the ruins of a Byzantine tower. The largest is about 2.43 mètres high, and from 3½ to 9 mètres in diameter. They differ from those of Fom Kositina by being built in successive and gradually decreasing courses, without any single covering stone; they rather resemble the Medrassen and the tombs in its vicinity.

EXCURSIONS IN THE NEIGHBOURHOOD OF TEBESSA.

1. **The Phosphate Quarries** of Messrs. Crookston Brothers are situated at Djebel Dyr, about 15 kil. from the town, at an elevation of 1400 mètres above the sea. This valuable substance occurs in beds of from 1 to 4 mètres in thickness, which sometimes run to a length of 1500 mètres. They are not in single beds, but often three or even more are superposed on each other, separated by broad bands of lime-

stone and marl, and with a superincumbent mass of limestone, sometimes 80 m. in height. The mind of man (not a palæontologist) cannot conceive the countless myriads of fish and other marine animals which have lived and died, not in vain, but to provide bread for our generations. It is full of sharks' teeth, echinidæ, and the shells of crustaceæ; the quantity is sufficient to provide manure for the whole civilised world for centuries. It is still more difficult to understand the successive upheavals and depressions which have caused them to become separated and crowned by limestone rock.

Close to the residence of the manager, the line of tramway which they have constructed passes at the foot of a cliff, beyond which is a grassy slope covered with stones and large boulders of rock, which have been disengaged from the hill above. Here may be seen a **Megalithic Village** absolutely unique, as far as the writer is aware.

The large detached boulders have been hollowed out into habitations. The chambers are generally 2 mètres square at the base; a ledge of 30 centimètres has been left all round, and a depression made in the middle of the floor about 10 centimètres in depth. Windows and chimneys have been cut in the sides, and one can clearly see the grooves into which doors were fitted. The interior height of each chamber is about 2 mètres.

Other companies have quarries in the same region, but those of Messrs. Crookston are the most important.

2. *Soumat-el-Kheneg*, Θ, situated about 9 kil. S. of Berzegan, on the ancient Roman road between Theveste and Capsa. This is the mausoleum of C. Julius Dexter, a standard-bearer, who lived in a farm near Feriana.

3. *Souma bint-el-Abri*, Θ, the minaret of the chief's daughter, 60 kilomètres from Tebessa, on the last northern slopes of Djebel Foua. This is a very interesting monument, in a good state of preservation, and though it contains no inscription, it is be-

[Alaeria]

lieved by the Arabs to be the resting-place of the celebrated Kahina, chieftainess of the Aurès, the legend regarding whom is given at p. 328. It is certainly a Roman mausoleum of a very ordinary type, and of a date much anterior to that of Kahina.

4. *Feidjet el-Ghousa*, Θ.—Situated at 50 kil. S. of Tebessa, in the plain of Bou-Djebel. This is a tumular monument, surmounted by a double inscription, showing that it was erected by two brothers to the memory of their father and mother.

5. But by far the most interesting excursion is one across the Tunisian frontier to **Hydra**, the ancient **Ammædara**, where still exists one of the most important triumphal arches in North Africa. The distance is about 36 kil.; the traveller will require to take everything he may require in the shape of food with him, as no provisions are procurable. There is a house belonging to the Tunisian Customs department at which it may be possible to sleep if the traveller takes his own bedding.

The arch in question is a very handsome one, the peculiar feature of which is the unusual height of its entablature, which is half that of the columns. On the frieze is the following inscription:—

IMP. CAES. L. SEPTIMIO. SEVERO. PERTINACI
AVG. P. M. TRIB. POT. III. IMP. V. COS. II. PP.
PARTHICO . ARABICO . ET PARTHICO
AZIAHENICO . DD. PP.

ROUTE 17.

Tebessa to Souk-Ahras, by Khamisa.

This is a journey which we do not recommend to the general traveller. Any one undertaking it must be content to put up with a little rough life, to take his provisions with him, and carry his own tent. Most travellers will be content to proceed to Tebessa by the railway, which has been con-

structed since this route was written (see p. 233).

Still, if one is able to dispense with the comforts of civilisation for a few days, he will find the journey a most interesting one from an archaeological point of view.

After leaving Tebessa, the road goes nearly N., crossing the plain of Tebessa.

5 kil. The Roman, or perhaps Byzantine ruins of *Khooshada*, a considerable post.

8 kil. At the foot of the mountain the spring and ruins of *El-K'issa*, Θ. Numerous tombstones have been found here, and amongst them a large proportion belonging to centenarians. Several hundred yards from the ruins is a handsome monumental tomb, in a very good state of preservation.

The road now passes over picturesque but desolate mountains of limestone. At

13 kil. *Ain-Azouagha*, there is a beautiful spring of clear water, and fine scenery.

26 kil. *Bordj Kaid El-Akhdar*, the residence of the Kaid of that name, a large stone building like a caravan-serai, where there is a little cultivation, and where the traveller can lodge in case of necessity. The road now emerges into a long dreary plain, covered with artemisia and rosemary, and follows the Tunisian frontier at a distance of a few miles.

32 kil. *Birket-el Faras* (Lake of the Mare), an extensive swamp, very deep in the centre. Ruins of Roman posts every few miles along the route.

40 kil. *Djebel bou-Jagar* or *bou-Jabar*, an isolated hill through which the frontier passes. E. of it is a very remarkable flat hill called *El-Kalaa* or *Kalaaat es-Sanan*, which from this point exactly resembles a gigantic martello tower perched on the top of a mountain. In a depression on the summit is a Tunisian village, the ancient capital of the Harars. The road to *El-Kalaa* is by a narrow path in the rock, accessible only on foot. *El-Meridj* is the best starting-point, distance 15 kil.

The name *Kalaaat es-Sanan* is derived from that of the first Mohammed-

dan chief who governed the country, *Hannach bin Abdulla es-Sanani*, a native of *Sanaa* in Arabia Felix.

52 kil. *El-Meridj*. A smala of Spahis, 2300 feet above the sea, and first of a chain of frontier stations which extend to the sea E. of *La Calle*. It is an immense fortified enclosure, with quarters for the European commissioned and non-commissioned officers, together with stables for the Spahis's horses. It has an abundant water supply and an excellent garden, but the climate is exceedingly unhealthy in summer, and during two or three months every year the garrison has to be removed to *Tebessa*. There is a canteen in the fort, at which provisions can be obtained, but travellers properly recommended by the Commandant of *Tebessa* are sure to meet with a cordial reception from the officers stationed here.

From *El-Meridj* the direct road to *Souk-Ahras* is by *Ain-Guettar*, continuing along the frontier, but with the exception of that fort there is not much to interest the traveller here. *Ain-Guettar*, like *El-Meridj*, is a smala of Spahis, 20 kil. S.E. of *Souk-Ahras*, celebrated as being the place where the first act in the insurrection of 1871 took place (see p. 310).

Near it is *Taoura*, Θ, the ancient *Tagura*, where are numerous Roman remains; as, indeed, there are all over the country. In no part of Algeria had the Roman sway taken so deep a root as in this province.

Instead of taking the direct road, we advise the traveller to make a *détour* to the N.W. for the purpose of visiting the interesting ruins of *Mdaourouch*, *Tifesh*, and *Khamisa*. But to do this he ought to provide himself with a tent, unless he is assured beforehand that there will be Arab encampments in which he can pass the night.

Starting from *El-Meridj* the track—for road there is none—passes over a plain swarming with game and wild animals, while in the more distant hills red deer still exist, though extremely wild.

In front are seen four or five isolated

peaks, *Djebel Abou Khadera*, *Djebel Kalb*, *Djebel Mäadther*, and *Djebel Makheirega*, etc.; while to the right is *Djebel Ouensa*, where are many Roman remains, Θ , amongst others 40 or 50 deep excavations in the rock, probably for the purpose of storing corn.

69 kil. *Ain-Esh-Shania*, Θ .—Here a beautiful and abundant spring issues from the midst of a thick grove of fig trees at the foot of a Roman or Byzantine tower, built probably to protect what must have been an important road between Carthage and Mascula (*Ain-Khenchla*). This is manifest from the numerous foundations of farms, or wayside establishments, everywhere seen along the route. A similar tower, the *Kasr el Ahmer*, exists about 6 miles from the smala of Ain-Guettar, the distance between each being one day's march. The fortification is about 9.14 mètres square, the walls being nearly 1.50 mètres thick, 50 cent. on each side, of solid blocks of cut stone, the interstices being filled in with rubble masonry. There appears to have been only one opening, with the exception of loopholes, a door, only the arch of which is now visible; the interior and exterior, as far as the spring of the arch, being filled up with the *débris* of the building. The tower must have been of great height, as 15.50 mètres of the wall is still standing on one side. This is a charming spot for a halt of an hour or two.

On leaving this the road passes through a defile separating *Djebel Kulb* (Mountain of the Heart) from *Djebel Mäadther*, a part of which is through a forest of Aleppo pines, and emerging from the wooded country enters a plain in which flows the salt river of *Oued Mellegue*.

79 kil. *Aiwenat-ed-Diab* (more correctly *Atoun-ed-Diab*, the Springs of the Jackals), 2390 feet above the sea, a convenient camping place on the right bank of the *Oued Mellegue*, where is a fountain of sweet water, the only one for miles around.

On the opposite side of the river is seen the conical isolated peak of *Kef-*

er-rakhm, and to the right of it *Djebel Makheirega*, which was visible from El-Meridj; on the top is a curious perforation like a natural arch.

After crossing the river the plain is sterile, affording but indifferent pasturage, till

91 kil. *Anchir Damous*, Θ , the ruins of a considerable Roman town. After passing this the country becomes more undulating and fertile. Shortly before reaching Mdaourouch, on the right side of the road, a few dolmens are passed.

115 kil. **Mdaourouch**, 3070 feet above the sea, the site of Madaura, one of the most ancient Roman colonies of Algeria, is admirably situated in a wide extent of fertile land, well watered, and on the S. side bounded by wooded mountains. It is the residence of *Hamana bin El-Howshat*, Kaid of the *Mahâtala*, who has a well-built borj amongst the ruins, and is extremely hospitable to strangers. His official residence is at *Tifesh*.

The site of the ancient city is well marked by ruins covering an immense extent of ground, for the most part only foundations of houses built as usual of large cut stones. To the east of the Kaid's house is a square tomb, with pent roof almost complete. It consists of two stories, the upper one having an arch in the middle and one end open, as if half of the roof of the lower story had been used as a terrace for the upper room.

At the extreme W. is another important building, perhaps a basilica, which cannot well be traced as it is buried nearly as deep as the crown of the lower arches.

But the most important of all is the Byzantine fortress or palace, consisting of a central keep, a tower on each side connected with it by curtains, the inner sides of which were probably cloistered, and an enclosure behind completing the *enceinte*.

The building is constructed of much older Roman materials; amongst which one sees bases and capitals of Corinthian columns; one very perfect bas-relief of a Roman in his toga, on the upper tier of masonry in the southern tower; and

numerous fragments of sculpture and tombstones.

This building is said to have been originally erected by the prefects Gabinus and Sabinus. From a bilingual inscription in Greek and Latin over the main entrance, unfortunately very much defaced, we have no difficulty in concluding that, like many other similar monuments, it was restored by the Byzantine general, Solomon.

The inscription has thus been restored by M. Leon Renier :—

† CUM [. A] EDIFICATA EST TEMPORIBUS [PIISSIM] ORUM DOMINORUM NO[STRORUM] JUSTIN[ANI] ET THEOD[ORAE] PROVIDENTIA[S]OLOMONIS GLORIO[S]I EX CONSU[LE] MAGISTR[M] MILITV]M IN ET PRAEFECTI AFR[ICA]E †

Many tombs lie scattered about, one distinctly Christian bears, within a circle, the following inscription :—



MUNIUS IVLIVS
BARGEVS NEPOS VIR HONE
RIS VICXIT IN PACE FIDELIS;
ANIS XXX III MINVS . ES XIII
DEPOSITVS EST V IDVS SEP
TEMBRES HIC SEC.

Madaura was the birthplace of Apuleius, a philosopher and romancer. The most famous of his works extant is the "Golden Ass," an allegorical work in eleven books, which contains the beautiful story of Cupid and Psyche. He was born A.D. 114, and was the first great original thinker produced by Numidia, if we except Juba II. who was educated at Rome. He subsequently settled at Cæa, the modern Tripoli, the country of his wife.

St. Augustine pursued his studies here till the age of sixteen, when he went to attend a course of rhetoric at Carthage.

The road, after leaving *Mdaourouch*, passes over a series of low hills, all well cultivated; but on reaching the culminating point one is quite unprepared for the magnificent panorama which bursts into view. As far as the eye can reach, E. and W., and about

4 m. across, extends the magnificent valley of *Tifesh*, one continuous cornfield, without a break, and without the apparent delineation of a field, or an acre of untilled land. Through it winds the *Oued Tifesh*, which flows in a westerly direction, and, after receiving numerous tributaries, eventually becomes the *Seybouse* and falls into the sea at *Bône*. On the northern side of the plain runs a line of mountains parallel to that which the traveller has just crossed, and on the southern slope of it are the ruins of

133 kil. *Tifesh*, the ancient *Tipasa*, 3140 feet above the sea. *El-Bekri* remarked that *Tifesh* was a city of great antiquity, remarkable for the height of its buildings and for the extent of its ancient ruins.

When the first Arabs, successors of Mohammed, invaded Africa, *Tipasa* resisted them for a long time. It was subsequently taken and pillaged, but soon sprang up again from its ashes. It was destroyed a second time by *Mousa En-Nasser*, and yet once more by *Moulai Nasser*, son of the sovereign of Tunis, in 1057.

Although one cannot conceive a finer position, the remains of the ancient city are by no means so extensive as at either *Mdaourouch* or *Khamisa*. The only remarkable ruin is that of the ancient fortress, built probably by the Romans, certainly restored by the Byzantines, as several Roman tombstones are embedded in its walls. It is built on a spur gently ascending from the plain, but separated from the main range by a remarkable ravine, which cuts it off like a gigantic natural ditch. Advantage has been taken of this conformation to construct a fortified position of considerable extent, occupying the whole of the sloping face of the hill. The interior is built up in massive terraces, the top of all being crowned by a citadel. The walls are about 9 feet thick, of huge blocks of cut stone, and flanked at intervals by square towers. The tracing of the whole is perfectly visible, though only little remains of the walls.

Besides this, the only other important building remaining is one of which

the character cannot be surmised. It has one very large arch, but all the cut stone facing has disappeared, with the exception of a fragment of the soffit of the interior, and two gigantic stones forming a cornice on the exterior; the rest are lying around.

The Kaid of *Mdaourouch* has a borj a short distance to the W., and the tents of the Sheikh of the district, Mohammed bin Ahmed, of the *Oulad Si Moussa*, are usually in the neighbourhood. There is a French borj at Tifesh for the service of the Remount; perhaps a tourist might find hospitality there.

It is said that at *Ouarce*, about 4 kil. to the S.E., there are numerous dolmens.

Leaving Tifesh, the road turns to the right, going through the range of hills by a narrow and tortuous defile. Here are many remains of the ancient Roman road leading to

145 kil. **Khamisa**, ancient *Thubursicum Numidarum*, 3084 feet above the sea.

The ruins of the ancient city cover a vast extent of ground, including several hills and the intervening valleys on the northern slope of the range separating it from Tipasa. It rose in terraces of various widths, the whole forming an irregular amphitheatre. Gardens no doubt surrounded it in all directions, as is manifest from the ruins of detached villas, and wells in which the marks of ropes rubbing against the stone facings are still traceable, and hydraulic works of every variety, such as cisterns and aqueducts.

The city must have been one of great importance in point of magnitude, though one sees nothing of the exquisite architecture for which *Tebessa* is so distinguished.

The principal buildings are:—A *triumphal arch*, quite perfect as far as the keystone, through which the road from Tipasa entered. It is constructed of comparatively small stones, and is not particularly elegant.

N.E. of it, and on the slope of the highest part of the hill, is the *Basilica*, which must have been an immense

structure built on various levels. It is in a very imperfect condition, but enough remains to show that its length must have been more than 66 metres. Several fragments of huge columns are lying close to it. It is now the site of an Arab encampment, and the yelping and savage attacks of a hundred Arab dogs make a visit to it by no means a pleasant operation.

To the N.W. of this, nearer to the head of the main valley, are what appear to be the remains of an immense *Palace*; and here it was that an inscription was found containing the name of the city, thus fixing a site which before was doubtful. It ran as follows:—

Imperatori Caesari Marco Aurelio Claudio Pio Felici Augusto Pontificali Maximo Gothico Maximo Parthico Maximo tribunitia Potestate III. Consuli II. Patri patriæ Proconsuli Respublica coloniae Thubursicensium Numidarum.

In it were discovered marble sculptures of various colours and great beauty. Access to the building was by a triple arch, now buried in *débris* as far as the spring.

Lower down, at the base of one of the hills, is the *Theatre*, the ground-plan of which, and a considerable portion of the superstructure, are entire; the stones of the remainder are all lying about, and it would neither be a difficult nor a costly task to reconstruct the building exactly as it existed.

The seats for the spectators are to a great extent entire, and not even covered with vegetation. Facing this is the stage, which, instead of being a straight line, is formed by three semi-circles which do not actually intersect each other, but are separated by small spaces. These were probably intended to contribute towards the scenic effect of the stage. The façade of the building was drawn as a tangent to these circles, and from each of them there was a door leading out of the building. The length of the façade is 53·33 metres, and the interior width of the building 59·43 metres.

Between the curved parts of the stage and the façade were four small chambers opening outwardly. They have no openings save the doors. On each side of the proscenium are two entrances, through one of which passes a water conduit. There are also several small chambers, used doubtless for theatrical purposes.

A short distance from this are the ruins of what probably were either the public *Baths*, or the water source of the lower town. A spring of very brackish water issues from it, now called *Ain-el-Yahudi* (Spring of the Jew). The water is unpotable.

All around are numberless foundations of houses, some of them with a few feet of the superstructure remaining, sufficient to show that the Roman house of that period was very similar to the modern Moorish one—an open central court surrounded by the family apartments.

There are also numerous *Tombs* in every direction in a very perfect condition, none, however, of the Christian epoch. Many carefully record the age of the person buried beneath, but none the date when he died. Some have sculptures as well as inscriptions, and others sculptures only. Most of them are headstones marking the vaulted tomb below. Some, however, are handsome monumental structures of one or two stories. The best of the headstones is on the hill E. of the theatre. It represents husband and wife joining hands before an altar, below whom are two Cupids with reversed flambeaux.

Another close to it represents a man riding on horseback, with the inscription:—

Q. POMPEIUS
Q. F. QVIR
SATVRNI
NVS. PIVS
VIX. AN. LXXXI
H. S. E.

It is very remarkable to note the great age recorded on these tombstones. It is by no means rare to find the age upwards of a century.

It is probable that this city had to suffer the fate of most others in

Africa, frequent destruction and rebuilding, as wherever excavations are made the ruins of older structures are found below existing foundations.

After the destruction of Carthage, B.C. 146, Rome took possession of the Punic colonies along the coast, and made the neighbouring districts into a Roman province. It is possible that Thubursicum was founded about this period. At all events an inscription proves that it was rebuilt for the third time by Caius Gracchus at the same time that he attempted to form a Roman colony at Carthage.

The Arab legend regarding the destruction of Khamisa is as follows:—A Christian princess of rare beauty, named Khamisa, governed the city. Her husband, Mdaourouch, king of Madaura, had repudiated and waged bitter war against her. Khamisa, unable to withstand him, learning that the Mohammedans had already conquered Hydra, Tebessa, and Gastal, sent a deputation to implore their assistance. Okba listened favourably to her petition, took Madaura, killed her husband, converted her subjects, and made her his favourite wife. But not trusting too implicitly to the good faith of his new converts, he took the precaution to demolish the fortifications of Khamisa before proceeding on one of his expeditions. It rebelled notwithstanding, whereupon he destroyed the entire city to its foundations.

The more probable derivation of the name Khamisa is from the fact of a great market having been held on the spot every Thursday, from the earliest times. Nothing is more common than for places in Algeria to be named after the markets. Thus the site of Thubursicum became *Souk-el-Khamis* (the market of Thursday) or *Khamisa*.

Nevertheless, the ancient name survived the city eight centuries. *Ibn Shemâa*, a Tunisian writer of the 15th century, recounts in his chronicle that during the reign of Abou Faris in 1337, a war broke out between that prince and the Amir of Bône, when the former pursued his enemy as far as *Teboursouk*, which is situated in

the country of the *Hanench* at the source of the *Medjerda*.

In front of the ruined city, which had a northern aspect, is an amphitheatre of hills, the open side of which is to the E. In this rises the famous river *Medjerda* (Bagradas of the ancients), here a mere thread of water. It flows south of *Souk-Ahras*, enters the regency of Tunis, and falls into the sea near *Utica*.

Through the fertile and picturesque valley of the *Medjerda*, the hills enclosing which commence to slope upwards almost from the river's bank, lies the way to *Souk-Ahras*, which is 29 kil. N.E. of *Khamisa* (see p. 310).

ROUTE 18.

Constantine to *Ain-Beida* by Railway.

Kil.	Names of Stations.	Kil.
..	Constantine . . . . .	..
7	Oulad Rahmoun	93
12	Sila	86
21	Sigus	81
32	Taxas	72
49	<i>Ain-Fakroun</i>	61
66	<i>Ourkis</i>	44
80	<i>Omm-el-Boaghi</i>	27
93	<i>Bir Rouga</i>	13
	<i>Ain-Beida</i> . . . . .	..

The railway follows pretty closely the old carriage road.

7 kil. *Sila*.

12 kil. *Sigus*. Near this are the ruins of an ancient and celebrated city, memorable as the residence, during various epochs, of several Numidian kings. The destruction of this place appears to have been very violent, and little remains save the foundations of a few buildings and a considerable necropolis. On the rocky plateau, opposite and S.W. of the latter, are many so-called megalithic remains, dolmens, cromlechs, menhirs, etc. Almost everywhere in Algeria these are found in the vicinity of important Roman positions, and here one was opened by M. Thomas in

1876, and found to contain amongst other things a bronze coin of the reign of Domitian; this would seem to indicate that whatever the age of other prehistoric monuments may be, this one at least is well within the historic era. *Sigus* was one of the thirty free cities mentioned by Procopius.

At about 14 kil. N.E., on a detached mamelon, are the remains of a Roman or Byzantine fortress at *Ain-el-Bordj* (Well of the Fort). The walls and citadel are very perfect. (?*Turris* *Cæsaris*.)

21 kil. *Taxas*.

After leaving this the line enters the plain of *Bahira-et-Tovila* (the long plain); long, as its name implies, level, and richly cultivated.

32 kil. *Ain-Fakroun*. A large caravanserai 2600 feet above the sea. A small village was created here in 1879.

The line still continues over extensive treeless plains, devoid of all permanent habitations, though Arab tents begin to be numerous.

66 kil. *Omm-el-Boaghi*. Government caravanserai, on the slope of a hill which forms the N.E. boundary of the valley. There is a small fort built of Roman materials above the caravanserai.

72 kil. The ruins of a Roman station.

80 kil. *Bir Rouga*. An isolated well surmounted by a masonry superstructure. Near it is a dolmen consisting of two flat stones, each 3 metres long, 1 metre broad, and 25 cent. thick, supported at the angles by four vertical stones 50 cent. square. About 65 metres to the E. three upright stones indicate the position of another, now destroyed.

93 kil. *Ain-Beida* (pop. 2165), 3936 feet above the sea. The name of the place means *white fountain*, from a source which yields 400 litres of water per minute.

Chief town of the *Haracta* tribe. The country round produces grain in immense quantities. The cattle and wool of the *Haracta* are also celebrated.

At *Djebel Rights*, 40 kil. W. of Ain-Beida, are some ancient copper mines worked by the Romans, both *à ciel ouvert* and by means of galleries. The ore yields 14 per cent of pure metal.

At *Djebel Hamimat*, 42 kil. W.N.W. of Ain-Beida, is a mine of oxide of antimony, one of the only two places in the world where this mineral has been found. It is usually met with as a sulphide.

At *Djebel Garca*, 48 kil., a mine of argentiferous lead ore exists; and at *Djebel Tafrent*, 49 kil. to the S., is found sulphate of iron.

Before the troubles of 1852 the only buildings at Ain-Beida were the three *Borjes*, now occupied by the Administrator, the garrison, and the remount. The *Haractas* were then the most insubordinate tribe in the country, and besieged the forts, which were in a precarious position, when they were relieved by a few hundred horsemen under *Ali bil Arabi*, who was rewarded for his devotion by being made Kaid, which office he still holds. Houses began gradually to surround the forts, the Jews scattered amongst the tribes settled under its walls, and soon a prosperous town sprang up.

The Arabs in this circle are much more superstitious than religious. They know hardly anything of their religion except a few outward observances which they have learnt by tradition. On the other hand, great numbers of them are affiliated to the various religious confraternities or *khouans*, especially to that of *Sidi Mohammed ben Abd-er-Rahman bou Koberain*. The writer had a curious instance of the indifference of the Kaid of Ain-Beida to one of the most rigidly observed Mohammedan customs, the seclusion of women. At an entertainment given to him and his family, the married and unmarried daughters of the Kaid were present, and sat with him as in European society.

This may be explained by the large admixture of Berber blood amongst them, their *patois*—the *Chaouia*—

being unmistakably a dialect of that language.

The circle of Ain-Beida is full of Roman remains, Θ . In the town are many vaults, which probably served as *Silos* for storing grain; one in the Curé's house is still perfect, and has its stone door in working order.

[From Ain-Beida there is a service of diligences to *Ain-Khenchla*, distant 108 kil., and 95 kil. from *Batna*. Pop. 1601.

The road passes close to the ruins of *Kasr Baghai*, Θ , the ancient *Bagaia*, a city which had already attained considerable importance during the Imperial era, as is proved by numerous inscriptions. During the time of St. Augustine it was one of the African cities in which Christianity had attained the most progress. Several councils were held here; but religious dissensions soon began to produce their destructive effect; the Donatists burnt the Basilica and committed the sacred books to the flames. Solomon was charged by Justinian to re-establish order in Africa. One of his captains, *Gantharis*, sent to operate in *Mount Aurès*, established his camp at *Bagaia*; *Procopius* says that it was then in ruins. It is probable that the Byzantines then built or restored the immense fortification, the trace of which is still entire. It consists of an irregular quadrilateral figure, the sides varying in length from 770 to 1227 feet, with round towers at three of the angles, and a square one at the fourth. The wall is further strengthened at irregular distances by square salient towers. On the N.W. side is a second enclosure or citadel; near the W. angle are the remains of a Mohammedan mosque, decorated with ancient columns still standing.

The identity of *Ain-Khenchla* with the ancient *Mascula* admits of no doubt; its distance from known points would prove the fact, even had not an inscription been found recording that, about A.D. 370, *Publius Cæcina Albinus* rebuilt the town which before had been destroyed.

This interesting inscription has thus been restored :—

Pro splendore felicium aeculorum domino-
rum nostrorum Valentiniani et Valentis sem-
per Augustorum atq; ve omni
Mascula a fundamentis construxit (atque
dedicavit) Publius Caesonius Caecina Albinus
vir clarissimus consularis sexfasculis pro-
vinciae Numidiae Constantine.

Mascula is more famous in ecclesi-
astical than in profane history. Several
of its inhabitants are celebrated in
Roman martyrology, especially Archi-
nimus, who was condemned to death
by Genseric. Its bishop, Clarus, at-
tended the Council of Carthage in A.D.
255. Another, Donatus, ceded to the
persecutions of Florus, proconsul of
the district, and revealed the place
where the holy books had been con-
cealed. He was the first of the recreant
bishops who was interrogated by
Secundus Tigisitanus on the subject,
before the Council of Cirta in 305.
Another bishop, Januarius, was exiled
by Huneric in 494, and a second of
the same name assisted at the Council
of Carthage in 525.

The value of Mascula as a strategic
position, situated, as it is, in a wide
and fertile plain just beyond the
northern slopes of the Aurès moun-
tains, has always been recognised.
It was probably here that Solomon
placed his camp during his second
expedition, and there is reason to
believe that it is the *Malich*, the
scene of one of the battles of Sidi
Okba.

After the first Arab invasion it
was still inhabited. El-Adouani thus
alludes to it:—"At the foot of the
mountains of Amanora there are three
cities, Baghai, Khenchla, and Guessas,
inhabited by Christians, each one sur-
rounded by vast gardens, irrigated
by the waters descending from Dj.
Mahmel."

Khenchla has now been created an
European centre of colonisation and
chief place of a circle. Colonists have
been attracted to the spot not only by
its fine climate, resembling very much
that of Provence, but by concessions
of from 25 to 40 hectares of land given
by the State. The great fertility of

the soil, its proximity to vast forests,
and the mineral riches of its moun-
tains, ought to secure the prosperity
of this fine though distant settlement.

To these advantages may be added
its position, midway between Batna
and Tebessa, and in close proximity
to the openings of the various valleys
which traverse the Aurès. It was
made the centre for supplying the
armies of General Herbillon in 1847,
and of General St. Arnaud in 1850, in
their expeditions against the Nemem-
chas.]

ROUTE 19.

Constantine to Bône by Railway.

This line, from Khroub onwards,
belongs to the *Compagnie des Chemins
de Fer de Bône à Guelma et Prolonge-
ment*; between Constantine and
Khroub, to the *Compagnie de l'est
Algerien*.

Constantine to Khroub, see p. 173.

Distance from Khroub.	Names of Stations.	Distance from Bône.
..	KHROUB	203
15	Bou-Nouara	198
27	Ain-Abid	185
42	Ain-Regada	180
53	Oued Zenati	174
69	Bordj Sabath	162
80	Thaya	156
95	H. Meskoutin	148
101	Medjez Amar	135
115	GUELMA	123
119	Millésimo	119
123	Petit	115
135	Nador	101
148	DUVIVIER, bif. S. Ahras	95
156	O. Frarah	80
162	Saint-Joseph	69
174	Barral	53
180	Mondovi	42
185	Randon	27
193	Duzerville	16
203	BONE . . . . .	..

15 kil. *Bou-Nouara*. A small
village constructed by the *Compagnie*

Général Algérienne (see p. 108). On the S.W. slopes of *Djebel Mazala*, about 2 kil. N. of the village, is a megalithic necropolis, containing monuments of many varieties; the general type is a dolmen composed of four vertical blocks and a table, forming a rectangular chamber, the whole surrounded by a circle of stones.

27 kil. *Ain-Abid*. Another of the same society's villages. Pop. 2168.

42 kil. *Ain-Regada*. A third village belonging to the same society, in a very unhealthy situation. The line henceforth follows the course of the *Oued Zenati*, which, after its junction with the *Oued Cherf*, becomes the *Seybouse*. Pop. 1200.

53 kil. OUED ZENATI. A rather important village. In this district are situated 83,000 of the 100,000 hectares of land so lavishly granted by the Empire to the *Société* (now *Compagnie*) *Général Algérienne*.

There is a service of diligences daily to Ain-Beida.

69 kil. *Bordj Sabath*. A very unhealthy district; no village.

80 kil. *Thaya*. A most interesting excursion may be made from this place to the great **Cave of Djebel Thaya**; but it is one which will be found very difficult, if not impracticable, by the ordinary traveller, although it may be done from Hammam Meskoutin also; the distance from the station is only 6 kil. The traveller should not fail to take food with him, and above all a supply of blue and red lights with which to illuminate the cave.

The opening of the cave is on the N.W. side of the mountain, which is composed of a compact limestone. The entrance-passage is spacious, being in no place less than 3 mètres in height. The exterior portion opens out like a hall, well lighted, dry, and adorned with beautiful tufts of ivy-leaved and other ferns. On the sides are carved numerous Roman inscriptions, so much effaced by time as to be hardly legible. M. Bourguignat, who was one of the first to explore this cave, has published an elaborate but rather fanciful description of it. He counted fifty-three in-

scriptions on the left, eight on the right, and three on the roof. Nearly all begin with the letters B.A.S.; one, better preserved than the others, has the words BACACL. AVG. SAC., from which it is inferred that this cavern was dedicated to the god Bacax; it is further gathered from the inscriptions, that every year the magistrates of *Tibilis* (Announa) came, with much ceremony, on a pilgrimage to Thaya, to offer a sacrifice to the god of the cavern. The inscriptions contain the names of consuls who were elected under the Emperors Caracalla and Geta, A.D. 211, and from this date they are mentioned up to A.D. 268. The following is one of them:—

BACCACI . AVG . SAC .
GENTIANO . ET . BASS
O . COS . VII . ID . MALAS
C . IVLIVS . FRONTO
NIANVS . ET . MOTES
tinvs . PRÆDES
Magg . THIB .

which may thus be rendered:—"In the year of the Consuls Gentianus and Bassus (A.D. 211), the 7th of the Ides of May, Caius Julius Frontinianus and Modestinus, Magistrates of Thibilis, offered sacrifice to the august Bacax." One is commemorative of two brothers who strayed into the cavern and were lost there—an accident which might very easily happen at the present day, and which probably would happen to any one entering without experienced Arab guides. The god Bacax is unknown to history; probably he was one of the local deities adopted by the Romans.

On leaving the passage containing the inscriptions the cave descends at an angle of not less than 45 degrees; the ground is covered with a thick layer of loose stones, which roll down with alarming velocity at almost every step made in advance. Great care should be taken to keep well to the right hand, as on the left there is an abyss which has never been explored, but which must be of great depth, and nearly vertical.

From the foot of this ramp the cave extends, with many accidents of level, to nearly three-quarters of a mile in

length and a thousand feet in vertical depth. The descent is difficult, and even dangerous throughout, as deep holes occur at numerous places, in which an unwary explorer might easily be engulfed. Sometimes he has to drop down steep precipices, by the aid of projecting stalagmites, at others to slide down muddy gradients, now to creep through small holes and narrow passages, and again to wade through pools of liquid mud. He has to traverse vast halls, intricate labyrinths, passages and chambers of every size and form. Groves of stalactites and stalagmites adorn the sides, while the lofty vaults are hung with the most exquisite fretwork, like the roof of a Gothic cathedral. The finest of all is the great domed chamber, at the bottom, which gives to the cave its Arab name, *Ghar el-Djamâa* (Cave of the Mosque); it is an immense, nearly circular cavity, with domed roof; from the ground rise magnificent stalagmites, like the trunks of palm trees, and in the centre is a huge block of stone, which M. Bourguignat imagines to have been an altar to Bacax.

In visiting this cave a few precautions are absolutely necessary.

1. The traveller should never attempt to penetrate without Arab guides.

2. He should have an abundant supply of candles, matches, and blue lights, or magnesium wire.

3. He should have canvas shoes with hempen soles to prevent himself from slipping, and he should only wear such clothes as he is content to abandon afterwards.

95 kil. *Hamam Meskoutin*.

This is a place at which no traveller in Algeria, who can spare the time, should fail to spend a few days, as, in addition to the wonderful natural phenomena of the place itself, there are several most interesting excursions to be made.

Hamam Meskoutin, or the *Accursed Baths*, were known to the Romans under the name of *Aquæ Tibilitinae*, so called from the neighbouring town of Tibilis, afterwards Announa. Some of the Roman baths cut out of the

rock are still used by the hospital patients; but the largest one is higher up the stream, which has since changed its course, owing to the mass of deposit having gradually raised the surface of the rock over which it then flowed. The temperature of the water is no less than 203° Fahr. which, taking into consideration the height of the source above the sea-level, is just about boiling-water heat; and is only surpassed by the Geysers in Iceland and Las Trincheras in South America, the former of which rises at 208°, and the latter at 206° temperature.

The whole scene is most extraordinary, and the mass of still waterfall is a sight never to be forgotten. The surface of the rock where the waters rise is everywhere thickly encrusted with carbonate of lime as white as marble. On issuing from the earth they fall in a succession of little cascades into a richly wooded glen, shut in by hills, and by the stream below the natives may be seen cooking their provisions and washing their clothes in the hot water. Above the cascades are numerous little natural basins of a creamy-white colour, bubbling over with boiling-water. The rock over which the water falls is rough and uneven, owing to the thick calcareous deposit, and presents the appearance of a petrified rapid.

Above and below the sources are some enormous cones, the largest of which is about 11 metres high and 12 in circumference. These were evidently deposited by the action of the waters overflowing the edges of the basins wherein they rose, which were thus gradually raised higher and higher, until the spring had no longer force sufficient to run over, but was obliged to find another outlet.

Earth has gradually collected on some of them, in which shrubs and flowers have sown themselves, giving the whole the appearance of huge flower-pots. Many of them have been split as if by earthquakes.

Clouds of dense steam rise from the falls and from the earth in all directions.

The best view is from below, where, looking up at the white shining rock and steaming water, the scene is very strange, and almost unearthly.

These springs are extremely efficacious in cases of rheumatism and nervous or cutaneous diseases, and for healing wounds. The volume is very large, being, from the two principal, 18,000 gal. per hour. The carbonate of lime becomes nearly all precipitated as the water cools, and when quite cold it is used for drinking purposes.

About $\frac{3}{4}$ m. from the hospital are some other springs, which are ferruginous and sulphureous. Their temperature is about 170° Fahr. The usual mode of application is by means of ordinary baths; but douches and vapour baths are also employed.

The convenience of being able to make use of both saline and ferruginous springs close together, ought to make Hammam Meskoutin become an important watering-place; and certainly, should this be the case, it will be able to vie in beauty of situation with any of the most celebrated baths of Germany or France.

M. Piesse thus quotes the Arab legend which gives its name to the springs:—

“An Arab, rich and powerful, had a sister, but finding her too beautiful to be married to any save himself, he determined to espouse her, spite of the prohibition of the Mohammedan law and the remonstrances and supplications of the elders of his tribe, whose heads he cut off in front of his tent. Then commenced the usual marriage festivities, and as the accursed couple were about to retire, the elements were set in commotion; fire came out of the earth, the water left its bed, and the thunder pealed forth in a fearful manner. When tranquillity returned, the Arab and his sister and every one connected with the feast were found petrified, the cones still representing the actors in this drama.”

At a distance of about 1500 mètres from the hotel is a curious cave, containing a small lake of water. In July 1879, after a storm and heavy rain, a subsidence of the soil took place, which

exposed to view an opening, giving access by an easy slope to a cave, at the bottom of which is a considerable body of the purest and most limpid water. As it takes a sudden turn to the right and becomes lost to view, it is impossible without a boat or a raft to ascertain its extent; the depth close to the edge is from 15 to 20 mètres. The formation of the rock in which the cave exists is very similar to that near the hot spring, evidently a calcareous deposit, tinged with rose colour by oxide of iron. The water is quite cool, though sometimes a slight amount of warm vapour exists in the cave. The traveller should take candles and some blue lights with him to illuminate the grotto.

A collection of Roman remains, principally from Announa, is arranged in the garden of the hotel.

[Excursions in the Neighbourhood.]

1. To **Roknia**, Θ . About 12 kil. N. of the station is the Megalithic Necropolis of Roknia, covering a space of 5 or 6 kil. in extent. The monuments have been much destroyed by indiscreet investigators, but a vast number still remain entire. They are small in size and very close together. The dolmens are usually composed of five stones, four uprights, and one horizontal slab; these are usually placed four or five together in one general enclosure.

2. To **Announa**. There is a bridle-path over the hills which greatly shortens the distance, but should the traveller prefer to go by carriage he should proceed to the high road from Guelma to Constantine. At the 84th kil. he will pass the small hamlet of *St. Charles*, and at 86 kil. that of *Ain-Amara*.

Just after passing the 87th kilometeric stone, a narrow path to the left descends a steep ravine, in which flows the Oued Announa, and mounts to the plateau on which stood the Roman city of Tibilis. The distance in a direct line is not more than three-quarters of a mile from *Ain-Amara*—

by the road it is about a mile and a half.

The ruins stand on an open platform scarped on all sides except the S.W., where it joins the lower counterforts of Ras al-Akba. The view in the opposite direction, looking eastward towards Guelma, is extremely fine, and these two considerations, capability of defence and a picturesque situation, appear here, as everywhere else in Algeria, to have determined the selection of the site. The ruins are worthy of a visit, though by no means in the best style of Roman art. They consist of a triumphal arch of the Corinthian order, with a single opening; on each side are two pilasters, the capital of one only exists; in front of these were disengaged columns, which have entirely disappeared, as also the whole of the entablature.

There are the remains also of what appears to have been another triumphal arch or one of the city gates, with two openings of equal size. The piers, which supported the arches, had a double Corinthian fluted pilaster embracing each angle, or eight pilasters to each pier. There is a Christian basilica, probably of the Byzantine period, and several other buildings of greater or less importance, fragments of the city walls, and frusta of columns lying about in every direction.]

101 kil. *Medjez Amar*, now a farm, formerly a fortified camp built by General Damrémont. After the failure of the first expedition against Constantine, Ahmed Bey, hoping to surprise the French, attacked it at the head of 10,000 men on the 10th September 1837. He was repulsed with great loss; and the army starting thence on the 1st of October arrived before Constantine on the 6th, and took that city on the 13th.

Here is the junction of the *Oued Zenati*, afterwards *O. Bou-Hamdan*, with the *O. Cherf*; their united waters form the *Seybouse*.

115 kil. **Guelma**. Pop. 6603; 1203 feet above the sea. It is built on the

ruins of the Roman *Kalama*, 2 kil. S. of the right bank of the *Seybouse*. It is a fortified place with a citadel, in which are extensive barracks, hospital and other military buildings. It is beautifully situated, the streets well planted with trees, and charming shady walks outside the walls.

Kalama is named for the first time in history by St. Augustine; its bishop then was Possidius, for forty years the intimate friend of the saint, and subsequently his biographer. When the French took possession of it in 1836, the ruins of the ancient *enceinte* and many of the principal buildings were, if not entire, at least traceable. The French city has been built principally out of the ancient ruins, and all that now remains to testify to its ancient splendour are the remains of the theatre, fragments of the baths, and a number of inscriptions and sculptured stones in the public garden.

Amongst these is a remarkably interesting monument, the tombstone of a young man twenty-nine years of age, who too confidently hoped that his wife would have rested beside him. The work is rude in point of art, but extremely beautiful in conception. It is a monolith of rose-coloured marble, square in plan, consisting of a pedestal with cornice, plinth, and base, supporting a crowning part rising on the same plan, terminating in an architectural feature which has now disappeared. On the principal façade the top piece bears a circular wreath enclosing two portrait busts in relief, that of the man only being completed, the features of the woman are not chiselled. The plinth has a garland suspended from the cornice, below which the surface is divided vertically for two inscriptions; that of the man only is filled up.

Dis Manibus Sacrum.

Fl. Nævilla Vixit Annis viginti novem diebus quindecim.

On the left side of the plinth is a folding door just shutting, symbolical of the terrestrial home which is being closed for ever. Above the cornice on the same side is another one opening,

representing the life to come. This is confirmed by the opposite side, which bears on the plinth the figure of a winged child with reversed flambeau, while above it is a cock crowing, to represent the opening day. The cock is standing on a figure resembling a loop; it may possibly be intended for a serpent, the emblem of immortality.

The theatre is close to the grain market: the steps are still tolerably perfect, as is the wall of the building around them, and the entrances at each side; but all in front of this semicircle, including the proscenium, has disappeared. It was of considerable size, and the spectators were able to enjoy a beautiful view of the mountains bounding the valley of the Seybouse.

The ruins of the baths are in the modern citadel: two large arches are still entire, and the springs of vaults on each side show that the walls in which they are pierced were united into a vast hall from which the other chambers had entrance. The masonry is not to be compared in quality to that of *Khamtsa*, or other ancient cities; it is of rubble, partly of stones and partly of bricks, with only the arches, corners, and bearings of the vaults of cut stone. Above each side of the arches appear to have been square turrets, the object of which is not apparent. Close to them were discovered four or five large cisterns in a perfect state of preservation, and near them an abundant spring of fresh water; this has been led into the cisterns, and they now serve to supply the citadel.

There is an important grain and cattle market held here every Monday.

[At 7 kil. on the old road leading to Bône is *Hammam-Berda*. A thermal spring gushing out close to the road, yielding 80 litres of water per second. The water is quite sweet, and irrigates all the valley through which it flows. This was evidently a favourite spot with the Romans, as there are ruins of baths and other buildings still remaining.

Another excursion may be made to the top of *El-Maouina*, the highest peak in the neighbourhood, about 4000 feet high, and distant 15 kil. The ascent may be made on horseback. The scenery is very beautiful, the road passes through forests of oak, and on the summit there is a depression shaped like an Arab saddle, in which is a lake about 1 kil. in diameter. There is a quarry of fine rose-coloured marble here, which was much used by the Romans of Kalama, and is still worked.]

On leaving Guelma the line descends the valley of the Seybouse; the country is exceedingly picturesque and fertile, woods of olive and other trees alternating with cultivation and pasture-land.

119 kil. *Millesimo*. Pop. 412. A small village to the N. of the line, between it and the Seybouse.

123 kil. *Petit*. A small village to the S. of the line

135 kil. *Nador*. Is one of the zinc mines belonging to the well-known company of *La Vielle Montagne*, but it is not a very important establishment, and was only purchased to avoid competition.

148 kil. *DUVIVIER*. Pop. 1468. A dirty but pleasantly situated village, whose single street is shaded with ash and beech trees. It was created in 1857, and named after a general. It has a market every Sunday, where a considerable trade is carried on in wool and cereals.

156 kil. *Oued Frarah*.

162 kil. *St. Joseph*.

174 kil. *Barral*. Pop. 1154. So called after the general killed near Bougie in 1850. This village was created in 1841.

An antique marble column, with an unsightly vase-shaped base, has been erected "Au brave Capitaine Mesme, mort pour la défense de Barral, 15 Juin 1852." This brave soldier reposes under a more suitable monument, a plain iron cross, outside the village gate. He was killed in heading a sortie of Spahis when the village was surrounded by the insurgents of 1852.

180 kil. *Mondovi*. Pop. 2275. Close to it is the property of *Guebar bou Aoun*. It was here that the Irish labourers got out by Marshal de MacMahon in 1869 were located. The experiment proved a complete failure; none of them understood a word of French, they could not work out of doors during the heat of summer; some died, many were sent home. The last batch of them took passage in a vessel which was run down by another on entering the harbour of Bordeaux, and were drowned.

185 kil. *Randon*. The village is 7 kil to the E.

193 kil. *Duzerville*. Named after General Monk d'Uzer. Pop. 3772.

The line finally crosses the *Oued Bou Djemâa*, not far from the ancient Roman bridge, and arrives at 203 kil. *Bône* (see p. 122).

ROUTE 20.

Excursion through the Kabylia of Djurdjura from Bordj bou-Arredj to the Oued es-Sahel and Fort National.

Bordj bou-Arredj.	Kil.	Miles.
Bordj Medjana	12	= 7½
Bordj Boni	16	= 10
Gelâa	6	= 3½
Ighil Ali	13	= 8½
Akbou	21	= 13½
Ti-Ilkouth	16	= 10
Fort National	22	= 13½

The above are the distances *on the map*; they by no means represent the amount of ground to be gone over.

By taking the ordinary railway route to Fort National (p. 153), the traveller obtains a splendid glimpse of Kabylia; but thoroughly to explore the country, and to see beyond all doubt the finest mountain scenery in Algeria, he would do well to find his way either from Constantine or Algiers to *Bordj bou-Arredj* (p. 169), and commence his excursion from that point. He must not shrink from a slight amount of inconvenience; he must be content to do without au-

berges, and to make the journey either on horse or on mule back. The authorities at Bordj will gladly assist him in obtaining the necessary animals and guides; the writer paid 5 f. a day for his mules. Tents would greatly conduce to the comfort of the expedition; but the traveller will always find some place in which to pass the night without any very serious inconvenience, provided he carries his own bedding.

The first stage of his tour is to Bordj Medjana, a flourishing village built on the site of the *Castellum Medianum* of the Romans, and the ancestral residence of the celebrated Bach Agha El-Mokrani, leader of the insurrection of 1871 (see p. 61). The Bordj, which was built by the Bach Agha, under the direction of French engineers, was completely dismantled after the confiscation of his lands, the outer walls only being retained; it contains the church, school, and other communal buildings, and constitutes a place of refuge to which the inhabitants of the village may retreat in case of attack. A beautiful spring issues from some Roman remains below the fort, and forms the only water supply of the village.

From this place a ride of four hours takes the traveller to the fort or block-house called Bordj Boni, which contains a suite of rooms and stabling, in which shelter, if nothing more, can be obtained; it was built after the last insurrection, principally for the convenience of Government officials visiting the district. There is an excellent spring at the foot of the mound on which the fort is built, and from the platform around it magnificent views of the Djurdjura range are obtained.

From this to Gelâa is a ride of not more than an hour and a half, through the most magnificent mountain scenery. The road winds up and down steep hills in a most tortuous manner, sometimes passing over the intervening ridges, and at others encircling their sides. On the right hand is a deep abyss, beyond which is a mass of hills and valleys, clothed to their sum-

mits with verdure, resembling a tempestuous sea suddenly arrested and turned into rock. On the left the view is more extensive; the foreground is as wild, while range after range of mountains succeed each other in ever-changing variety of form and colour, till the extreme distance is shut in by the majestic snow-capped ridge of Djurdjura. No other peak can ever depose this from its place as the monarch of Algerian mountains. Chellia and Mahmel, in the Aurès, may be higher, but they rise from more elevated ground, and thus lose much of their grandeur; while for beauty of outline and richness of tints, the Djurdjura range, seen from the south, with the Oued es-Sahel at its foot, is superior to them both.

Kalaa—or Gelaa, as it is here pronounced, meaning a fortress in Arabic—is one of the most picturesquely situated villages in Kabylia. It is built on the extreme end of a mountain, more than 3000 feet above the sea, surrounded on three sides by precipitous ravines, through one of which flows a tributary of the Oued Sellam. The cliffs descend in a succession of perpendicular scarps, separated from each other by narrow terraces, so as to be quite inaccessible. The fourth side, where the hill rises behind the village, can only be reached by a narrow winding path, which a few resolute men might defend against an army.

In former times this was a city of refuge for such as wished to escape the justice or vengeance of the Turks, who never succeeded in reducing its inhabitants to their sway. Its proximity to the *Biban*, or Portes de Fer, itself a strong position, enabled the Beni Abbas to command that pass, and consequently the route between Algiers and Constantine, and they were in a position to exact a tribute from the Turks as the price of keeping open this communication.

The village of Gelaa is divided into two portions, each ruled over by a Sheikh independent of the other. The lower portion belongs to the Oulad Aissa, and the upper to the Oulad Hamadoosh. It is the principal place

of the Beni Abbas, a once powerful confederation, extending N. and S. from beyond the Oued es-Sahel to Boni, and E. and W. from the river of Gelaa to the Oued Maghir. The villages in this district are well built, of stone, roofed with tiles, and very often they have small enclosures or gardens attached, while the interiors are finished off with great neatness, and even some rude idea of decorative art.

The inhabitants of Gelaa have little or no arable land, but they are famous for the manufacture of bernouses. They make a considerable quantity of olive oil, and are renowned merchants, purchasing the carpets and haiks of the S., and selling them at the markets of Constantine and other great towns.

Between the two villages are a number of small springs, quite dry in summer, so that for several months in the year the water supply of each village has to be brought from the valley below. In the upper village is an ancient mosque, with some wood-carving over the door; in the cemetery attached is buried the Bach Agha el-Mokrani. His body was brought here after the battle of Oued Soufiat, where he was killed. It is much to be regretted that his tomb should be quite unmarked. The Commandant Supérieur of Aumale, Colonel Trumelet, had the happy idea of marking the spot where he fell by a stone bearing this inscription, "Ici tomba mortellement, frappé par les balles du 4^{ème} de Zouaves, le 5 Mai 1871, le Bach Agha de la Medjana, El-Hadj Mohammed bin el-Hadj Ahmed el-Mokrani, chef de l'insurrection."

The connection of the Mokrani family with Gelaa dates from the 16th century, when one of the ancestors, Bin Abd-er-Rahman, established a little principality here after the expulsion of the Spaniards from Bougie. The last of these princes was murdered by his subjects in A.D. 1600. Mokrani owned several houses in Gelaa, and his brother was at one time Kaid of the Beni Abbas.

There is a large guest chamber in the upper village, and the traveller will be sure of hospitable treatment from the Kaid of either portion, who

are admirable specimens of Kabyle gentlemen.

One of the most interesting sights of Gelâa is the extraordinary method employed for storing grain—in enormous baskets of alfa grass, 4 to 4½ mètres high and 3 in diameter at the thickest parts, resembling gigantic bottles with the necks knocked off. These are raised about a foot off the ground, and four or five of them are placed side by side in a room. In these vessels, called *Zarâa*, a reserve supply of corn has been known to keep good for fifty years.

There is a direct route from this village to Akbou, but the traveller would do well to make a *détour* in order to see *Ighil Ali*, the most considerable village in the Beni Abbas territory.

After passing through the village the traveller has to descend a path so steep and difficult as hardly to be practicable for mules. On reaching the bottom of the hill, however, it improves, and soon the high road between Bordj bou-Arredj and the Oued es-Sahel is reached. The scenery is still remarkably grand, but less green than before reaching Gelâa. The ground is poor, schistose, and only adapted for the cultivation of fig and olive trees, which constitute the principal riches of the country.

After about four hours' riding *Ighil Ali* is reached; in fact, there are three villages placed so close together as to form but one—Ighil Ali, Tizairt, and Azrou.

The last crowns the hill to the west, while the two others at its foot are separated by an inclined plane, in which is situated the Medressa. It was one of the favourite ideas of Napoleon III. to educate the Arab and Kabyle races in the French language and ideas. Numerous educational establishments were organised with this view at Algiers, Constantine, Fort National, and elsewhere, nearly all of which collapsed with the Empire. Amongst others, a college was established here at which Kabyle youths were taught both Arabic and French. These villages are much better built and more picturesque than most others in Kabylia; many of the houses have two stories, some even

three; the walls are decorated with arches and quaint holes for ventilation, and not a few have arched colonnades.

The general appearance of the whole, sloping upwards in a pyramidal form, is not at all unlike many Italian villages. They used to be celebrated for the manufacture of arms, but as that is now a forbidden industry, they have extended their manufacture of bernouses, silver ornaments, etc.; and one of them, Tizairt, is celebrated for its wood-carving. The objects most usually manufactured are maces, not unlike those of Gog and Magog, and spoons and trinkets connected by chains cut out of a single piece of wood.

After leaving Tizairt the road descends rapidly, passing numerous picturesquely situated Kabyle villages, and enters the Oued es-Sahel, a little below the ruins of Bordj Tazmalt, a fort destroyed during the last insurrection.

At this point the road enters the great valley called Oued es-Sahel, or *river of the coast*.

The new village of Tazmalt is on the opposite side of the river.

After traversing the rich plains of the Beni Melekeuch, the road passes to the north of the celebrated mound of *Akbou*, and soon reaches the village itself.

Akbou is the ancient *Ausum*, and is the country of the well-known Bin Ali Cherif (see Rte. 13).

From this place the ascent of the Djurdjura range commences, through a rich and highly cultivated country, abounding in fig, olive, and ash trees. The two first are the riches of the country; the last (*Fraxinus Australis*) is also of great utility, as its leaves afford excellent food for sheep and goats in summer and autumn when the grass fails.

At two hours' distance is the village of **Chellata**, the chief place in the country of Illoula, and the ancestral home of Bin Ali Cherif. There is a large Zaouia here for the education of Kabyle youth—one of the most renowned in North Africa—kept up at

his expense; and in the enclosure in front of it are interred the members of his family. To visit such a holy place as this in Tunis or Morocco would be impossible; in Algeria the Mohammedans no longer dare to exclude Christians from their mosques; but it requires very little penetration to see that their presence is most distasteful to them. Beyond this the place is of no interest, and, like all other villages in the Kabylia of Djurdjura, it is extremely filthy, a marked contrast to the scrupulous cleanliness of those on the other side of the Oued es-Sahel. The writer and his party pitched their tents on a grassy slope, well clear of the village and its evil odours, and were on their mules before daybreak on the following morning, hoping to see the sun rise from the summit. It took an hour to reach the *Col de Chellata*, one of the passes leading from the Oued es-Sahel, across the Djurdjura range, between the peaks of Tili-jouen on the left, and Tizi-bart (5670 feet) on the right. From the top of the former there is an unequalled view, in some respects finer than that from Chellia, inasmuch as the foreground possesses greater boldness and variety of outline.

Commencing from the west there is a splendid view of the whole crest of the Djurdjura range, with its two most conspicuous peaks, *Azrou-n-Tehour* (5980 feet) and *Tangout Lalla Khadidja* (7543). These are crowned by *Walis* or Saints' tombs, favourite places of pilgrimage with the Kabyles: beyond these, to the north, is the country of the Beni Illilten, Fort National, and the sea in the extreme distance. More than fifty villages can be counted in this direction. On the opposite side of the pass are the mountains of Babor and Ta-Babot, crowned with their forests of Cedar and Pinsapo; that of the Beni Abbas completes the panorama; while the ever-present Mamelon of Akbou, surrounded by a great stretch of level land, thickly covered with olive groves, occupies the foreground to the south. The effects of light and shade seen here at sunrise will never be forgotten, and probably, with the exception of the short ride from Boni to Gelaa, there is

no view to equal it in the whole colony of Algeria or Regency of Tunis.

After passing through this defile the road descends rapidly towards the *Tifilkouth* or river of the *Beni Illilten*, by a steep and difficult road, but one of exquisite beauty. The whole country is cultivated with as much care as a garden. The road is completely overshadowed by magnificent ash trees, while the banks on either side are covered with ferns, broom, wild roses, and flowers of every colour, and a clear cold stream flows at the bottom, fringed with magnificent wild cherry trees.

After ascending the opposite bank the road passes through the village of Ti-filkouth, and winds through the most delightful shady lanes and orchards, mounting and descending almost perpendicular precipices, crossing rapid streams, but always passing from one scene of loveliness to another, till, after a ride of about two hours from the stream at the bottom of the valley, the village of *Soumaris* is reached. Here the writer passed the night, and was entertained by the *Amin el-Omina* with true Berber hospitality.

Leaving this, a ride of fifteen minutes brings the traveller to the high road from Fort National to the Oued es-Sahel by the *Col de Tirourda*, and close to a house which has been erected by the Engineer Department for its employés. The distance hence to the fort is 30 kil.

The scenery now changes somewhat—it never ceases to be exceedingly grand—and the view of the Djurdjura range improves as it is seen in full front, instead of foreshortened from one end. The admirably engineered, but bare and shadeless road, with its regular curves and gentle gradients, becomes intolerable after the wild, shady lanes and natural scenery through which the traveller has just passed; and it is not without a feeling of relief that he reaches Fort National (see p. 155), thence to proceed by the prosaic but convenient diligence to Tizi-Ouzou and so by rail to Algiers.

ROUTE 21.

Algiers to Ténès by Orléansville.

Algiers to Orléansville by railway.

Diligences to Ténès, in connection with the trains.

Leaving Orléansville by the Porte de Ténès the Chélif is crossed by a light bridge 200 mètres in length. Just beyond, on the right bank of the river, is *La Ferme*, once a military agricultural establishment of 50 acres in extent, now an annexe of the commune of Orléansville.

From this the route passes over dreary country, with very scanty vegetation. Looking back upon Orléansville, the trees planted in and around that town are the only ones in sight, the rest of the plain being sandy and bare, here and there varied by patches of scrubby brushwood.

220 kil. *Aïn-Beïda* (the white fountain). A small isolated colony of a few houses. A little farther may be seen to the right of the road a koubba, dedicated to *Sidi Abd-el-Kader*; and to the left that of *Sidi Mammâr bin-Mokhala*, and a village called *Warnier*, after a well-known deputy for Algiers, who died in 1879.

229 kil. *Les Cinq Palmiers*, where there is a small but good inn. The diligence stops here for dinner going to Ténès, and for breakfast on returning.

238 kil. *Les Trois Palmiers*.

241 kil. *Kirba*. From this point the aspect of the country becomes more varied, the road running for some distance parallel to the river Allala, which flows through some pretty valleys and glens.

On the right of the road are the ruins of a Roman fort, but the stones have mostly been made use of by the *géné* for building bridges, etc.

Several ruins of Roman forts exist along this road. The mountainous country through which it passes appears never to have been thoroughly Romanised, and the population is to this day in great part Berber.

256 kil. *Montenotte* (pop. 3491), a prosperous agricultural village.

At 11 kil. from Montenotte, in the

valley of Oued Allala, and at 7 kil. from the high road, is the village of Cavaignac, created in 1879. The copper mines of *Oued Allala* to the E. are no longer worked, but another copper mine was opened in the spring of 1874 on the hill to the W. The road hence to old Ténès passes through a wild and beautiful mountain gorge.

Following the works which convey the water supply of Ténès from the Oued Allala, not far from old Ténès, the remains of the Roman water-works can be traced for a few yards, but their barrage was placed lower down in the water-course than the modern one.

Large tracts of forest which covered the mountains on both sides of the road were burnt by the Arabs in the summer of 1873.

260 kil. *Old Ténès*. This town, inhabited entirely by Arabs, is surrounded on three sides by a deep ravine, at the bottom of which flows the Allala, and is often called Little Constantine. It was once a noted pirates' nest.

There are still to be seen in the rocks on which this town is built large iron bolts to which the inhabitants used to fasten their galleys after having drawn them up the river. To the E. of the town may be seen the remains of the old Roman road, which did not follow the aqueduct, but ran behind the hill on the right bank of the river. Two arches of the bridge which crossed the Oued Allala are still in a good state of preservation.

The town itself is surrounded by a *Pisé* wall flanked at the corner by large square towers, probably the work of the Spaniards, now in a very ruinous condition.

261 kil. *Ténès*. Pop. 4634.

Modern Ténès, founded 1847, is situated on the site of the Phœnician town, afterwards the Roman colony of Cartenna. We learn from Pliny that it was *Colonia Augusti*, a colony of the soldiers of the Second Legion. This latter fact appears to indicate a warlike character in the neighbouring native tribes, and from an inscription found here and preserved in the Museum of Algiers, we gather that these were the Bakoyta mentioned by Ptolemy.

The *Itinerary* of Antoninus says that Cartenna is 63 m. from Cæsarea (Cherchel), but there does not appear to have been a Roman highway along the coast. The great road between the E. and W., and for the most part Roman colonisation, kept in this part of Africa to the great plains. Cartenna was deserted for old Ténès by the Berbers at an unknown but early period—tradition says on account of the bleakness of its situation. Before the railway from Algiers to Oran was made, Ténès was the port of the central Chéliïf plain, and had a large export trade, but it is now a declining town. The harbour, about a mile distant, is an artificial one, similar to that at Algiers, but is open to the west wind. Outside the town, on the western side, is a public garden where several Roman tombs with inscriptions may be seen; one is that of a soldier of the 24th Legion.

In the neighbourhood are the remains of several Roman and two Phœnician wells of considerable size, near which a number of coins of both nations were found, also a Punic inscription, now in the Museum at Algiers.

ROUTE 22.

Mostaganem to Tiarét by Railway.

Distance in Kil. from Mostag.	Names of Stations.	Distance in Kil. from Tiarét.
..	MOSTAGANEM	197
6	Pélissier	191
21	Ain-Tédelès	176
32	Oued el-Kheir	165
47	Mekalia	150
55	Sidi-Kheltab	142
64	Bel-Hacel	138
76	RELIZANE (junction)	121
85	Oued Khelloug	112
95	Sidi-Moham. bin Aouda	102
119	Fortassa	78
134	Djilali-bin-Amar	63
163	Méchéra-Sfa	34
173	Sidi-All-ben-Amar	24
187	Tagdempt	10
197	TIARÉT . . . . .	..

The line from Mostaganem to Tiarét was completed in 1889; it is divided into nearly equal sections by the main line from Algiers to Oran at Relizane. The ordinary traveller will hardly care to make the first half of this journey: the whole interest of the route, and it is considerable, is contained in the southern section.

Mostaganem. Pop. 13,768.

There was a maritime town here in Roman times, whose harbour disappeared during a terrible earthquake, in the reign of the emperor Gallien. Under the Moors it was a town of but little importance, but in 1516 it was taken from the Sultan of Tlemçen by Arouj, and was fortified and made a provincial capital by his brother, Kheir-ed-din, shortly afterwards.

In 1558 it was attacked in vain by the Spaniards. The 16th century was the period of its greatest prosperity. It had then a population of about 40,000, with considerable commerce, and the rich country round it was highly cultivated. Exposed to the attacks of Spaniards and Arabs, and impoverished by misrule, this prosperity was of short duration, and had long disappeared when the French took possession of it in 1833.

It is now the centre of an important agricultural district, with seventeen European villages, and of a superior native population living in stone houses. The roads are excellent, the soil is fertile, and though the rainfall is small, springs and wells abound, and water large gardens filled with fruit trees.

A picturesque and curious Arab town, called *Tijdid*, sweeps round Mostaganem to the E. in a semicircle, separated from it by a fortified wall and the cliffs of the ravine of the *Ain-Suefra*, whose bottom is occupied by irrigated gardens, from which the white Moorish houses rise in irregular steps.

The most interesting drive within easy distance is to *Ain-Bou-Dinar*, 13 kil., a French village, which lies on a ridge above the valley of the Chéliïf, a few miles from its mouth. Walking

to the slopes just beyond the village, an extraordinary view opens suddenly. The river is seen some 500 feet below, winding through the rich valley to the sea. The Turkish bridge and French village of *Pont de Chélif* are visible higher up the stream. Under the hills beyond the Chélif are Arab tents and gardens, surrounded by the prickly pear. Numerous koubbas and Berber houses stand out on the opposite mountains of the Dahra, of which the most conspicuous is *Montagne Rouge*, so called from its red soil and cliffs of a yet deeper tint.

[A route has been made through the Dahra, passing *Cassaigne* and *Renault*. At 1 kil. from the house of the Agha of *Nekmaria* on this road are the caves of the *Oulad Riab*, where took place a tragedy which created a great sensation in Europe at the time.

In April 1845 commenced the insurrection of the Dahra, instigated by Bou Maza, to quell which a column was sent under the command of Colonel (afterwards Marshal) Pélissier.

In June he pursued a body of the *Oulad Riab*, who took refuge in some immense caves, situated in a deep ravine between two isolated hills.

We feel that only an eye-witness should narrate what followed. A Spanish officer¹ in the French service, writing to the *Heraldo*, states:—

“On the 18th, the column of Colonel Pélissier left early to besiege the famous grotto or cavern which we had observed the day before, situated on the bank of the *Oued Frechih*.

“After having sent chasseurs in front of the most accessible openings of *El-Kantara* (the ravine above mentioned), the troops commenced to cut wood and to collect straw to light a fire on the west side, and thus oblige the Arabs to surrender, as any other means of attack would have been most sanguinary, and probably fruitless.

“At 10 A.M. they commenced to throw the faggots from the counterfort of *El-Kantara*, but the fire did not declare itself before noon. During

the evening our tirailleurs approached nearer, and shut in the openings of the cave. Nevertheless, one of the Arabs succeeded in escaping from the east side, and seven others gained the banks of the stream, where they obtained a supply of water in their leathern vessels.

“At 1 P.M. the soldiers commenced to throw faggots at the eastern opening, which this time took fire before the two openings of the other side, and by a singular circumstance the wind blew both the flames and the smoke into the interior without almost any escaping outside, so that the soldiers were able to push the faggots into the openings of the cavern *as into a furnace*.

“It is impossible to describe the violence of the fire; the flame rose above the top of *El-Kantara* (more than 60 mètres), and dense masses of smoke swept like a whirlwind before the entrance of the cavern. They continued to supply the fire all night, and only ceased at daybreak. But then *the problem was solved*; no further noise was heard.

“At 4½ A.M. I went towards the cave, with two officers of engineers, an officer of artillery, and a detachment of 50 or 60 men of these corps. At the entrance were found dead animals, already in a state of putrefaction; the door was reached through a mass of cinders and dust a foot in depth, and then we penetrated into a great cavity of about 30 paces in length. Nothing can give an idea of the horrible spectacle which presented itself in the cavern. All the bodies were naked, in positions which indicated the convulsions which they had suffered before death. What caused most horror was to see infants at the breast lying amongst the *débris* of sheep, sacks of beans, etc.

“The number of corpses amounted to 800 or 1000. The Colonel would not believe our report, and sent other soldiers to count the dead. They took about 600 out of the cave, without counting those *entassés les uns sur les autres comme une sorte de bouillie humaine*, and the infants at the breast,

¹ *L'Afrique Française*, p. 440. P. Christian. Paris, 1846.

who were nearly all concealed below the clothes of their mothers. The Colonel testified all the horror which he felt at this frightful spectacle, and principally dreaded the attacks of the journals, which could not fail to criticise so deplorable an act."

It is not fair to quote this, without quoting also the justification of the act which appeared in the *Akhbar*.

"In order that the public may be able to appreciate these sad events, it ought to understand how important it was *pour la politique et pour l'humanité* to destroy the confidence which the population of the Dahra and of many other places had in the caves.

. . . Colonel Pélissier invested them, an operation which cost several lives, Arabs and French. When the investment was complete, he tried to parley with them by means of the Arabs in his camp: they fired on his *parlementaires*, and one of them was killed. Nevertheless, by persistence, he succeeded in opening negotiations, which lasted all day, without result. The Oulad Riah always replied, 'Let the French camp retire; we shall come out and submit ourselves.' It was in vain that repeated promises were made to respect their persons and property, to consider none prisoners of war, but only to disarm them. From time to time they were informed that combustibles were collected, and that they should be warmed if they did not finish. Delay succeeded delay till the night arrived." After passing in review the probable consequences of retiring from the attack, the narrative continues: "He decided on employing the means which had been recommended to him by the Governor-General;" with what success we have already seen.

The caves are still exactly in the condition in which they were then left, and no Arab can be induced to enter them.]

About 3 kil. from Mostaganem is Mazagan (pop. 1638), celebrated as the place first attacked by Abd-el-Kader, after the rupture of the treaty of the Tafna of 1837. But Mazagan

is most famed for its having in 1840, with a garrison of no more than 123 men, under Captain Lelièvre, repulsed the prolonged assault of a great body of Arabs under Mustapha bin-Tami, khalifa of Mascara. A column has been erected to commemorate this feat, which is recorded by an inscription. The church was also built in commemoration of the same event.

6 kil. Pélissier. Pop. 662.

21 kil. Aïn-Tédeles. Pop. 678.

Two uninteresting French villages. 4 kil to the E. is *Bellevue*, formerly called *Souk el-Mitou*, and beyond there is no European colonisation whatever in the country till we reach Relizane; the line passes over red sandy ground, low hills covered with a forest of thuya, and subsequently the wide plains of the Mina. The various stations are:—

32 kil. *Oued el-Kheir*.

47 kil. *Mekalia*.

55 kil. *Sidi-Kheltab*.

64 kil. *Bel-Hacel*.

76 kil. *Relizane*, see p. 186.

Beyond this, after passing the cultivated land of Relizane, the line enters the valley of the Mina, one of the most considerable of Algerian rivers, taking its rise in the district S. of Tiaret. It is very sinuous in its course, and generally flows in a deep bed; water-courses, dry for the most part of the year, cut up the valley deeply on each side, and furnish their tribute to the main stream during rainy weather.

85 kil. *Oued Khelloug*.

95 kil. *Sidi-Mohammed-bin-Aouda*; the tomb of this local saint is in an Arab village. On a remarkable peak behind it is a koubba in honour of Sidi Abd-el-Kader el-Jailani, one of many which are seen all over the country, generally in the most prominent positions. Up to this point the ground has been very arid; beyond, richer vegetation and Arab cultivation is seen, and when the writer passed (in March) the whole country was covered with what seemed the richest mosaic of wild flowers of ever-changing colour.

119 kil. *Fortassa*. A European village 2 kil. to the W., on the road to

Mascara. Roman ruins to the E. of line.

134 kil. *Djilali-bin-Amar.*

146 kil. Note here the peculiar conformation of the rock, which explains how so many huge slabs were used in monuments similar to those of Méchéra-Sfa. It is disposed in strata, broken up into more or less isolated masses, and the strata frequently separated from each other by layers of earth. It is sometimes difficult to decide, on a cursory examination, whether these are natural masses of slabs piled one on the other, or megalithic constructions.

163 kil. *Méchéra-Sfa.* This is the station for the wonderful megalithic monuments called *Souama* (the minarets) by the Arabs. The best way to see them is to make a picnic from Tiaret, come here by the morning train, and return by the evening one. It will be easy to hire horses or mules at the station, especially if the traveller orders them on going to Tiaret.

They are distant about 7 kil. from the station, on the left bank of the Mina, which has dug itself a deep rocky bed, and here encloses a peninsula, surrounded on three sides by the river, with steep and sometimes precipitous cliffs.

The name Méchéra-Sfa signifies *Ford of the flat Stones*. The whole promontory is of the construction which we have mentioned above; huge layers of stone of varying thicknesses, natural monoliths squared and dressed by nature, ready to serve as roofs for chambers dug out in the softer strata below them, or to be transported for use elsewhere.

Immediately on crossing the ford of the Mina we come upon what was undoubtedly a cemetery, but one which probably served from very early Numidian till quite late Christian times. The tombs are generally buildings made of large naturally squared stones roofed in with immense monoliths, and now open towards the river. They probably were at one time completely enclosed, but the stones forming the front walls have either been washed

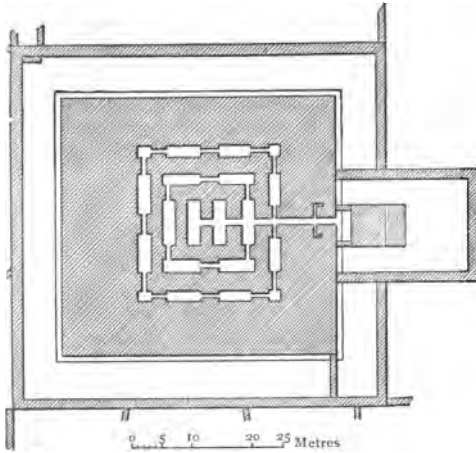
down the hillside by rains, or thrown down by excavators in search of treasures or antiquities. One of them is still tolerably entire. It has a front wall of large squared stones in which is a small entrance; the roof is supported by a rough pillar. On the walls are three rude sculptures in relief, which have been thought to represent the Christian symbols of a fish, a dove, and a lamp.

Sometimes advantage has been taken of the rock itself to form one or more sides or even the roof of the building, and in nearly every instance the floor has been excavated in the soil.

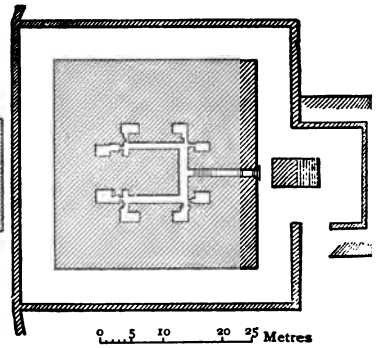
There are several tombstones undoubtedly of Roman origin; one bears a Latin inscription between two rose-like ornaments. It begins with the usual formula, D.M.S., but this is no proof that it was pre-Christian. The Christians, not to offend too much the prejudices of the pagans, adopted this commencement, only instead of understanding by it "*Diis manibus sacrum*," they understood it to mean "*Deo magno sacrum*."

Beyond this necropolis the entire summit of the hill has been converted into a stronghold divided off into three portions by cross walls, all of large but not gigantic stones, which bear no appearance of having been even hammer dressed. There are here and there a number of drinking troughs hollowed out of single blocks, but with this exception there is no trace of cutting. The whole interior of the place is covered with ruins of houses of the same rude construction—no trace of architecture or luxury of any kind. M. de la Blanchère considers that this must have been a Christian city, and speculates as to what was the name of its bishop.

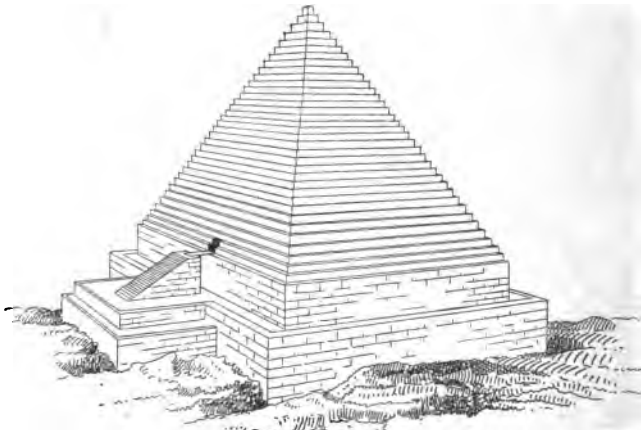
It may have been so, or perhaps only a fortified position or *oppidum* destined to receive the inhabitants of the neighbouring districts in time of war or danger. The megalithic tombs below were probably those of important personages; they are not numerous enough to indicate that they were the ordinary sepulchres of a city. On the plateau opposite, above the right



0 10 20 30 40 50 60 70 80 Feet
DJEDAR F AT TERNATEN.



0 5 10 20 25 Metres
 0 10 20 30 40 50 60 70 80 Feet
DJEDAR A ON DJEBEL EL-ADJAR.



RESTORATION OF A.

bank of the river, there are also a number of megalithic tombs, of the dolmen type, which were crowned by tumuli of earth.

187 kil. *Tagdempt*, or *Takdemt*.

Best known as the headquarters and arsenal of Abd-el-Kader in the days of his power. It was destroyed in 1841. The hillside to the E. is covered with ruins of rough stone buildings; on a mamelon to the W. is the ruined house which the Emir himself occupied. Takdemt was at one time a Roman station of some importance, perhaps *Gadavum*, and here Abd-er-Rahman founded the Capital of the Ibadite empire in A.D. 761.

197 kil. **Tiaret**. Pop. 4026. 3552 feet above the sea. This is supposed to occupy the site of the Roman station *Tingurtia*. Ibn Khaldoun mentions it under the name of Tahert, and records that it was one of the places which offered a formidable resistance to Sidi Okba on his march to Tangier. An Arab town followed, and the present one was built by General Lamoricière in 1842. It was originally all contained within a fort, built on the lower slopes of *Djebel Guezzoul*; but as this left no room for extension, a new town has sprung up in the valley below, and on the slope of the opposite hill, which is crowned by a negro village. In the former are the troops, the merchants more especially depending upon them, and the Commandant Supérieur, who governs the Military Commune of *Afrou* in the south; while in the latter one are the civil establishments and inhabitants presided over by the *Administrateur* of the *Commune Mixte*, and the *Maire* of the town.

There is a Government stud-farm and a Smala of Spahis near the town, to the E. The whole country round is covered with Roman ruins. The traveller must not, however, expect stately buildings like the triumphal arch and Forum of Timgad, or the quadrifrontal arch, temple, and Basilica of Tebessa—all the ruins here are devoid of architectural merit: he will

not even find cut stones, marble ornaments, or other objects which distinguished the Roman style. Nothing has been overthrown and destroyed by the hand of man; here buildings have fallen down by the action of time and weather; but their very number and extent prove how complete was the Roman occupation of the country, and how highly the land must have been cultivated by them, and no doubt also by the native Numidians. Roman influence here had little to do with luxury or art, but was eminently favourable to agriculture.

Nothing is more surprising when passing through the rich valley traversed by the railway than to note the utter disproportion between the extent of cultivable land and the present number of inhabitants it supports. Owing to the lazy and unthrifty habits of the Arab, who will always plough round a thistle rather than root it up, it takes a greater extent of land to maintain him in misery than it would do to make an European family rich and prosperous. So far there is little appearance of any European colonisation in the country, but the powerful humanising agency of the railway will no doubt effect a transformation before many years have elapsed. The ruins of the past prove what this may become in the future; the *Commune Mixte* of Tiaret alone contains nearly one hundred places corresponding to Roman cities and villages sufficiently important to leave their vestiges apparent at the present day.

The chief object of the traveller in coming to Tiaret will doubtless be to visit the extraordinary monuments called the **Djedars** (walls or buildings in Arabic). This can be done in one long day. Take a carriage and drive about 35 kil. on the road to Frennda, and when opposite the first or most eastern of the Djedars, which is clearly seen from the road, turn into the fields and drive straight to the foot of the isolated peak on which it is situated. As there is no water here, send the carriage on to a spring

called *Atn-Ghorab*, and having inspected the first three Djedars rejoin it on foot, and so return to Tiaret. The traveller will have only about 3 kil. to walk. Should he not be satisfied with this group and desire to visit the other as well, it can best be done by sending a horse on the day before and riding to it.

The Djedars are built in two distinct groups between Tiaret and Frenda. The first consists of three monuments on three separate but contiguous peaks of *Djebel El-Adjdjar* (hill of the Djedars); the second is at some distance to the W., at *Ternaten*, at a place called *Koudiat Heraoui*, Ø; each is distinctly seen from the other.

The general form of all three monuments is the same—a rectangular or square podium surmounted by a pyramid. In this respect they differ from the older and finer buildings of the same kind, the *Tombeau de la Chrétienne* and the *Medrassen*, which have a round base crowned by a cone.

Some are in a good state of preservation, others are in a more or less ruinous condition; two of the first group and one of the second can be easily entered (candle required).

The disposition of the passages and sepulchral chambers will be best understood by the woodcuts, which we have borrowed from M. de la Blanchère's *Memoir*.¹ A is the first of those on *Djebel El-Adjdjar*; F, the largest, but the least carefully constructed, is one of those at *Ternaten*. They are built of finely-cut stone; that marked A is the most instructive of all; it is situated most conspicuously on an isolated conical hill; it is 34·60 mètres square, the podium is 3·50 mètres high, but it is not easy to determine the original height of the pyramid above it. The two portions are separated by a single string course, which is in fact the first and projecting step of the pyramid. This was of cut stone steps, filled in with a mass of rubble masonry.

¹ *Voyage d'étude dans une partie de la Maurétanie Césarienne*, par M. R. de la Blanchère, Arch. des Miss. Sc. et Litt., 2e Sér. tom. x., 1883

The monument was surrounded at a distance of 8 mètres by a wall, forming a sort of sacred enclosure, probably planted as a garden; it also was of cut stone, in some places as much as 6 mètres high. The courses of masonry receded about 10 centimètres from each other, which produced a very pleasing effect. In front of the east side was an isolated platform, ascended by a flight of steps, and probably connected with the main building by means of a drawbridge. The door of the pyramid was here, above the podium. It is probable that this platform was designed for some sort of religious ceremony.

The whole was surrounded by an outer wall of irregular shape of which only traces remain.

The chambers are roofed with enormous flat slabs of stone, and both they and the passages are sufficiently high to admit of a person standing erect. They were generally shut off from each other by stone doors, which sometimes descended from above, sometimes opened like an ordinary door, and sometimes slipped into lateral grooves.

These monuments are mentioned only by one author, Ibn-er-Rakik, a historian of the 10th century. Ibn Khaldoun, quoting from him, says that an inscription existed on one of them, "I am Soleiman the Serdeghos (Strategos). The inhabitants of this city having revolted, the king sent me against them. God having permitted me to conquer them, I have caused this monument to be erected to perpetuate my memory."

The late General Dastugue found an inscription here which he sent to Baron de Slane, the learned translator of Ibn Khaldoun, who thought he traced in it the words *Soleiman* and *Strategos*, thus identifying it with that quoted by his author. This has been much disputed, and no one since has ever been able to find the inscription in question.

It is hardly possible that the celebrated Byzantine general, the successor of Belisarius, actually constructed any of these monuments. They are manifestly tombs, and the only question is

that of the date of their construction. Numerous fragments of rude sculpture exist in them; the monogram of Christ, a lamp, fishes, pigeons—all funereal emblems; many short inscriptions, one commencing with the letters IN DEO X (Christo); another, portion of a dedication to Caracalla, taken from some other building.

M. de la Blanchère concludes that they vary from the 5th to the 7th century; that they were the sepulchres of a native dynasty, Catholic in religion, which may have been at one time a vassal of the Romans before the Vandal invasion, subsequently allied to the Byzantines, and that it lasted as late as the Arab invasion, when probably it was swept away. The princes mentioned by Procopius were possibly of this family, Mephanias and his son Massonas.

A remarkable inscription throwing light on this family was discovered at *Lamoricrière*, the ancient *Attava*, and now in the Museum of Oran. The translation is as follows:—

“For the health and preservation of *Masuna*, king of the Moorish and Roman people, this citadel has been built by *Masgvin*, Prefect of *Safir Ider* (?), and *Maximus*, Procurator of *Attava*, finished it in the year of the Province 469” (A.D. 508).

A mortuary inscription was found in the Pyramid of *Ternaten*, containing the Christian monogram and the date 441 of the Province (A.D. 480).

[There is a route from *Tiaret* to *Frenda*, 56 kil., and thence to *Mascara*, 105 kil. The writer has done the journey, and he can conscientiously advise future travellers to leave it undone. The only thing of interest is the ruined fortress of *Tagramaret*, Ø, half-way between *Frenda* and *Mascara*. The vicinity is covered with the foundations of Roman farms, each with its cistern; the fortress is rectangular, protected at the angles by bastions and with gates defended in the same manner. To see this, however, it will be necessary to stay a day here, and the only place where a traveller can put up is at the house of a well-known

and very hospitable kaid, *Abd-el-Kadir Boukors*.

Between *Tiaret* and *Teniet-el-Ahd* there is no road, but the country is practicable on horseback; it is full of Roman remains, Ø, and is well worthy of being explored.¹]

ROUTE 23.

Algiers to Tlemçen by Railway.

Distance in Kil. from Algiers.	Names of Stations.	Distance in Kil. from Tlemçen.
..	Algiers to Ste. Barbe de Tlélat (Route 10)	..
..	Ste. Barbe de Tlélat to Tabia (Route 26)	..
88	Tabia	189
90	Taffaman	126
108	Ain-Tellout	115
118	Lamoricrière	106
130	Oued Chouly	96
139	Ain Fezza	84
	Les Cascales	..
	Tlemçen	..

90 kil. *Ain-Tellout*. Pop. 475.

A magnificent spring, issuing from the midst of a thick growth of oleanders, determined the site of this village. It was formerly a station on the Roman road between *Albulæ* (Bin Youb) and *Tlemçen*.

108 kil. *Lamoricrière*. Pop. 1172.

An important village named after the general of that name. Near it are the remains of a Roman camp named *Hadjar Roum*—the Roman Stones. An inscription was found here, of the beginning of the 6th century, proving that this place, instead of being the *Rubra* or *ad Rubras*, as had hitherto been supposed, is the site of the *Castra Severiana*, mentioned by *Morcelli* as an episcopal see. It was evidently a

¹ See “Une Reconnaissance Archéologique entre *Teniet-el-Ahd* et *Tiaret*,” par *Victor Wailla*, *Bull. de la Corres. Afr.*, 1848, Nos. V., VI.

military post, intended to cover the exit from the upper Isser valley which communicates with the High Plateaux.

118 kil. *Oued Chouly*.

130 kil. *Ain-Fezza*. Pop. 528.

A small village situated on the most elevated part of the road between Bel Abbes and Tlemçen. Residence of the administrator of the district.

139 kil. **Tlemçen**. Pop. 23,110.

Every one has heard of Granada and its Moorish antiquities. The name of Tlemçen is less known, yet it was a contemporary city hardly less illustrious, with a population of 100,000 or 150,000, renowned for its philosophers and its artists, the seat, equally with the Moorish cities in Spain, of civilisation and refinement, of commerce and wealth, the centre of an extensive trade, the capital of a powerful nation; and even now it is hardly inferior to it in beauty of situation and in architectural interest. It has no one grand monument like the Alhambra, but it possesses many religious edifices, which, if smaller, are hardly less beautiful.

Tlemçen lies about 2500 feet above the sea, on the northern slope of a mountain called *Lella Setta*, and its climate, vegetation, and scenery resemble those of Central Italy. Frost, though never severe, is not uncommon, and snow occasionally lies on the ground for a fortnight at a time. Changes of temperature are also both sudden and frequent.

The neighbourhood, irrigated by numerous springs and streams of water, is highly cultivated, and the luxuriance and abundance of apple, pear, cherry, almond, peach, and still more of fig and olive trees, explain the name of Pomaria given to the original Tlemçen by the Romans; but the winters are too cold for the orange or lemon to flourish, except in the most sheltered situations. The olive trees are remarkably fine and very productive; the oil made from them is equal to that of the S. of France. Each olive tree is said to be worth 15 f. a year, and the number of young trees planted by the colonists shows that the cultivation must pay them well.

Pomaria was not an important town,

and seems to have been so utterly ruined in the disastrous period which followed the Vandal invasion, that its very name was forgotten, when A.D. 790, or 174 of the Hejira, Idris bin Idris bin Abd-Allah, an able and enterprising monarch, obtained possession of the site from the Berber nation of the Zenata, and established his brother in possession, after he had commenced building a great mosque. The Idrisides held Aghadir, as Tlemçen was then called, 140 years. The Fatimites next possessed it 24 years, and it then fell into the power of the Ifrénides for 125 years. During the succeeding dynasty of the Almoravides, who conquered Aghadir A.D. 1080, it grew greatly in importance. A new town called Tagrart rose on the site of the present town, and to W. of Aghadir, separated from it by a stone's throw, and with distinct fortifications. The name of Tlemçen was eventually given to the two united towns. Aghadir remained for many years the royal city and "the city of soldiers," among whom was a guard of several thousand Christians. Tagrart became the city of commerce. Foreigners, Jews, and Christians received full protection, and the latter possessed a church. The present barracks of the Spahis was the Kissaria, or the Bazaar of the Frank, made over to the Catalan, French, Genoese, Pisan, and Venetian merchants, with its wall and its gates closed at sunset, under the exclusive government of the consuls. It is supposed there were at one time 5000 Christians in Tlemçen, governed by their own representatives.

The greatness of Tlemçen, which commenced under the Almoravides,¹ culminated under the Almoahides, who succeeded them A.D. 1145, and a new wall surrounding the double town was commenced A.D. 1161.

Under the two dynasties of the Almoravides and the Almoahides Tlemçen was one of the chief cities of the great Mohammedan empire of the West;

¹ The word *Almoravides* is a corruption of *El-Marabetin*, pl. of *Marabet*, a religious person. *El-Moahides* is correctly *El-Moahedown*, or affirmers of the unity of God.

but (1212) the battle of Nova Tolosa dealt a fatal blow to the power of the latter, and Tlemçen was taken from them A.D. 1248 by Ghamarasan, chief of the Zenata tribe of Abd-el-Ouad,¹ and became under him and his successors the capital of a kingdom embracing the present provinces of Oran and Algiers. The most notable events under the early Abd-el-Ouadites were the two long sieges to which the ambition of the Merenides, the dynasty then ruling in Fez, subjected Tlemçen, the immediate cause of both being the refusal of the Sultan of Tlemçen to give up fugitives. The first siege was raised A.D. 1308 in consequence of the murder of Abou Yakoub, Sultan of Fez, after lasting over eight years, during part of which Tlemçen was closely invested and the besiegers' camp was surrounded with a wall, of which a portion still remains at Mansoura. The second siege commenced in 1335. The wall of Abou Yakoub was again employed by his successor, Abou el-Hassan Ali, known as the Black Sultan, and the investing force secured against a sudden attack from behind by a line of towers. The city fell into his hands in 1337; but the Merenides lost it again ten years after the death of Abou el-Hassan in 1348-49.

Abou Hammon Moussa, another Berber of the tribe of Abd-el-Ouad, succeeded in expelling them in 1359, and the Abd-el-Ouadites held it till 1553, though during a great part of this period their power did not extend beyond Ténès, while for the last forty years they were vassals of the Spanish sovereigns who are said to have garrisoned the Meshouar and to have built that part of the existing wall which faces the town.

In 1553 Tlemçen was captured by the Turks under Salah Rais, Pasha of Algiers. The fall of the town was not less complete than that of its royal family; and the Arab proverb was verified, that "where the hoof of the Turkish horse has trod the grass refuses to grow." Science, literature,

and art, which had been long decaying, became extinct; agriculture declined, manufactures and commerce almost ceased; at such a distance from the sea it had not the resource of piracy, the only trade which flourished. The palaces have long vanished; not a Moorish villa is to be seen in the neighbourhood. Even the olive trees either appear to be centuries old, or else to have been planted since the French occupation.

From 1830 to 1834 the possession of the town was disputed between Abd-er-Rahman, Emperor of Morocco, and the Turkish troops, who, during the latter part of these four years, were in the pay of France and held the Meshouar.

Abd-el-Kader appeared before the walls in 1834, when the Moors evacuated the town. General Clauzel entered Tlemçen in January 1836; and after imposing a fine of 150,000 f. on the inhabitants, left Captain Cavaignac in command of a small garrison in the Meshouar, or citadel. The town was then again besieged by Abd-el-Kader; but Cavaignac, with his garrison of 275 men, succeeded in holding it against the whole army of the Emir until the following June, when he was at length relieved by General Bugeaud.

In 1839, by the treaty of the Tafna, Tlemçen was ceded to Abd-el-Kader, who made it his capital; but his troops were perpetually quarrelling with the inhabitants, and the ruined condition of a great part of the town dates from this period. Before long, war was renewed, and in 1842 the town was occupied by the French.

It is now extremely prosperous; the neighbourhood is fertile and singularly well supplied with water, and it is the chief town of an extensive district which exports annually large quantities of olive oil, olives, dried figs, wool, sheep, horned cattle, corn and flour, besides cloths, carpets, and leathern articles of native manufacture. Alfa is brought here from Seb Dou, 43 kil., to the S., and prepared for exportation. The special manufactures of the place are brightly coloured blankets, and the

¹ We adopt the ordinary orthography instead of the more accurate one of Abd-el-Wahid, etc.

red shawls called *tahhila*, worn by the Jewish women.

Amongst the remains of Moorish architecture within the walls of Tlemçen, the following are the best worth visiting.

The chief mosque, *Djamâa-el-Kebir*, in the Place d'Alger, has seventy-two columns, all square except two. The arches are horse-shoe, and for the most part round and plain, but some few are pointed, and others decorated on their interior side with plaster-work. The ceilings are of wood, and plain. The mihrab, which is on the S. side of the mosque, is finely ornamented with arabesques, lighted from above; and its round horse-shoe arch is very beautiful. On it is the date A.H. 530, corresponding to A.D. 1136, which shows that the mosque was built under the Almoravides. The present building, however, is the successor of a much more ancient one, founded, according to Ibn Khaldoun, in A.D. 790. The large chandelier, with a diameter of 2'44 mètres, was the gift of Ghamarasan, the first of the Abd-el-Ouadite Sultans, A.D. 1248 to A.D. 1283, who himself was buried here. The courtyard is partly paved with Algerian onyx, and the basin of the fountain is of the same material. The minaret, which is of brick, and about 34 mètres high, was built by Ghamarasan.

The *Mosque of Sidi Ahmed Bel Hassan el-Ghomari*, now an Arab school, and situated in the same Place d'Alger, has been restored by the French and offensively decorated on the exterior with modern tiles. The interior, however, contains some exquisite productions of Moorish art, especially the arabesques round the mihrab; their variety, richness, and refinement is probably unsurpassed anywhere. The date of this work, A.H. 696, or A.D. 1296-97, is inscribed here, and in the centre of the third arch. The mosque is supported by six columns of Algerian onyx. Nearly all the walls and arches have been covered with arabesque decoration, and the greater part remains.

On the opposite side of the square next to the Mairie was the *Medressa* or college, now destroyed, where Ibn Khaldoun taught.

The *Mosque of Sidi Ibrahim* is worth a visit, and in the tomb of the saint, which is contained in a separate building, there are some remarkably fine arabesques.

The above is almost all that remains of ancient Tlemçen within the walls worthy of particular notice; nor have the walls themselves fared better—they have been replaced by modern defences.

The destruction of the *Meshourar*, or citadel, has been most complete. Built in 1145 as the residence of the governor, it became the palace of the Abd-el-Ouadites. The Arab writers often make mention of its splendour and of the brilliancy of the court held there; but the Turks and time, and the *Génie militaire*, have spared nothing except the minaret of the mosque and the outer walls.

The *Museum*, or rather the want of one, is a disgrace to the city; many precious relics are stowed away, without care or order, in some of the lower rooms of the Mairie. These consist of tumular inscriptions; fragments of tile mosaics; arabesque work; columns of Algerian onyx excavated from the ruins of the mosque at Mansoura; and catapult balls, some weighing about 250 lbs., supposed to have been used during the two great sieges in the beginning of the 14th century.

The most interesting object is the standard cubit measure of the *Kissaria*; it is in marble, and bears in Arabic the inscription: "Praise and thanks be to God, this is the cubit measure of the Kissaria, which may God establish. In the month of Rabia Eth-Thani, in the year 728," corresponding to March 1328. The length of this cubit is 47 centimètres, or 18½ inches.

The Mairie itself is a phenomenon of ugliness; the central portion is supposed to be decorated with a pediment supported by horns of plenty; but these features are rather suggestive of a tombstone and elephants' trunks.

The Church is an exceptionally good one for Algeria. The font is a fine basin of green serpentine, found in the ruins of Mansoura.

The mosque of Abou Abdulla esh-Shoudi, more usually known by the name of Sidi-el-Halawi, the Sweetmeat-maker, lies immediately outside the walls. Leave Tlemçen by the gate of the Abattoir, turn to the left, and you come to a small collection of native houses inhabited by negroes, with its own mosque and minaret; keep on above these, and on turning round the N.E. corner of the town wall you will see below you the mosque of Sidi-el-Halawi. As you descend to it take notice of the mosaics on the minaret. The mosque and its court are decorated with arabesques; but it owes its chief interest to its eight columns of Algerian onyx, with Moorish capitals, and to the richly carved ceilings of cedar over the lateral naves, and the colonnade on each side of the court. The ceiling of the Mihrab should likewise be noticed. The date 754, equal to A.D. 1353, is inscribed over the portal, which is very beautifully decorated with tile mosaics and arabesques.

At least three circles of ancient fortifications can be made out. The innermost of these followed the line of the French wall, and there is but little of it left. The walls and towers of the two outer circles are in many places still standing, and, added to the advantages of its situation, must have made the Tlemçen of the Almoahides and early Abd-el-Ouadites a place of great strength. The walls and towers are built of large masses of concrete or pisé (2 to 4 mètres is no uncommon size), which now look like stones, and are almost as durable. The towers, with the exception of two round ones near the N.W. corner, are rectangular; but though these walls are highly picturesque and interesting, it is at Mansoura that the system of Moorish fortifications can be most easily studied.

All visitors to Tlemçen should, if

possible, take the two undermentioned walks:—

1. Leave Tlemçen by the gate of the Abattoir, go straight down the hill, and in from 10 to 15 minutes you will come to the minaret, which is all that remains of the mosque of Aghadir. The lower part of this beautiful tower is constructed of large hewn stones from the Roman Pomaria, which occupied the same site as Aghadir, and on several, both inside and outside, Latin inscriptions are found; one is said to bear the name of *Pomaria*. The upper part of the minaret is of brick, doubtless of a later date than A.D. 789, when a mosque was first built here. The fortifications commence a few yards lower down. The arch of the gateway by which the road passes fell down not many years ago. It was called after Sidi Daoudi, the patron saint of Aghadir, whose tomb lies just below. The neighbourhood of this tomb is probably the best point from which to view the fortifications. Tourists are, however, strongly recommended to descend a little farther, taking a path to the right, into the valley of the *Oued Kalia*, and after crossing this brook to turn again to the right. A walk through gardens filled with fruit, ash, elm, and walnut trees, and passing close under the outer or second line of the walls and towers of Aghadir, and within sound of the *Oued Kalia*, leads in from 5 to 10 minutes to the Oran road; but it will be well to recross the brook just before the high road is reached, and to follow a path to the right, which will conduct in about two minutes to an old Arab burial-ground, with tombs of Marabouts, and an octagonal one of singular elegance. The cemetery is beautifully situated, and elm, and especially ash trees (*Fraxinus Australis*), are here found of a size unusual in N. Africa. One of the latter, still a flourishing tree, measures $4\frac{1}{2}$ mètres in circumference.

2. Leave Tlemçen by the gate of *Bou Medin*, follow the road to Oran about 150 yards, turn to the right across the bridge over the *Oued Kalia*. The ruin on the left was part of the mint. Immediately after passing the

bridge, turn again to the right and follow the path along the edge of the *Oued Kalia*. Extensive remains of walls and towers will be met with along the S. side of Tlemçen, to which this path conducts. This side being naturally the most exposed, was most strongly fortified. On the western side there are not many fortifications of importance, except at the north-western angle, where there are the two round towers already mentioned. Visit the Christian cemetery and return by the *Porte des Carrières*.

A whole morning should be devoted to **Sidi Bou-Medin**.

About 2 kil. from Tlemçen towards the S.E., and on the slope of a hill, which shelters it from the sirocco, lies a mean-looking Arab village, distinguished at a distance only by its minaret. This is *El Eubbad*, more commonly called Sidi Bou-Medin, which was the home of religion and science when Tlemçen was inhabited by warriors and statesmen. It is in this more fortunate than its neighbour, that its monuments have been better preserved.

Shortly after leaving the gate of Bou-Medin the road turns to the right, passes a ruined building which was the ancient mint, nearly opposite the entrance to the public gardens, and traverses the great Arab cemetery, now much circumscribed in extent. Several koubbas to the right and left, many of which possess a history, and the minaret of a ruined mosque, give interest to the walk. The only one in a good state of preservation is that of *Es-Snusi*, the exterior of which is square with a tiled roof, but the interior is a very elegant dome. After passing through the, to all appearance, poverty-stricken village, the visitor sees before him a Moorish porch of painted woodwork, which gives entrance to the mosque and its dependencies.

To the left on entering is the ruined **Palace** of the founder of all these noble structures, commonly called Abou el-Hassan Ali, or the Black Sultan, but whose name and ancestry, as written in full over the entrance gate of the

mosque, is "Our Lord the Sultan Abdulla Ali, son of our Lord the Sultan Abi Said Othman, son of our Lord the Sultan Abi Yousuf, son of Yakoub Abd el-Huk." He was the first of the Merenides and reigned from A.H. 737 till 749 (A.D. 1337 to 1348). The actual date inscribed over the door is A.H. 739. On the tablets below the spring of the arch, at the main entrance to the mosque, his name is written, "Our Lord the Sultan Abou el-Hassan Abdullah Ali."

This was one of his many palaces, and it might well have been his favourite abode. It could not have been very large, but it was richly decorated, and the view from the arcaded terrace, overlooking a wide expanse of plain and mountain, and even the distant sea at Rachgoun, compares favourably even with the far-famed Vega of Granada.

It is below the general level of the court, and until 1881 it was covered with earth and rubbish, so that its existence was not suspected; now it has been excavated under the intelligent superintendence of M. Collignon, *Conservateur des Monuments historiques*.

On the same side, also below the level of the court, is the **Koubba of Sidi Bou-Medin**, the patron saint of Tlemçen. His correct name was Shaoib ibn Husain el-Andalousi, surnamed Abou Median, corrupted into Bou-Medin. He was born at Seville in A.H. 520, corresponding to A.D. 1126. He passed over from Spain to Fez, where he devoted himself to the study of theology, and after travelling all over Spain, Algeria, and even as far as Baghdad, he died at Ain-Tekbalet within sight of Tlemçen, in the seventy-fifth year of his age.

The writer ventures to give one earnest recommendation to all visitors. This, to the Mohammedan, is very holy ground; let the visitor remove his shoes at the outer door of the courtyard; and he will have his reward in the increased attention paid to him by the guardians.

A short staircase descends into an antechamber; to the right and left

are tombs of persons connected with the mosque, but not of great antiquity. There is nothing remarkable in the architecture of the antechamber; to the right is the entrance to the tomb itself, and an inscription on the door informs us that, having been greatly injured by fire, it was restored by Sidi Mohammed, Bey of Oran, in A. H. 1208 (A. D. 1792). The koubba itself contains two tombs; to the right is the resting-place of the saint himself, to the left is that of his friend and disciple Sidi Abd-es-Selam of Tunis. The roof and walls retain all their fine old arabesque work, the principal feature of which is the repetition of a cartouch containing the inscription *El-Mulk Lillah*, "The kingdom is God's." The colouring is crude and modern. The whole interior is full of banners of brocade, votive candles, ostrich eggs, and the usual paraphernalia of Arab tombs.

On remounting to the upper court we see before us the principal entrance to the **Mosque** itself, glorious in design and sparkling with the most beautiful tile mosaics; in the best style of Moorish art. These glazed tiles,¹ used in making the mosaic patterns, are supposed to have been made in Fez, or some other parts of Morocco; they are somewhat ruder than those employed in the Alhambra, but exceedingly effective; the square tiles came probably from Spain.

To the right hand is a half-ruined building, which, before the French conquest, was recognised as an inviolable sanctuary for criminals or refugees from justice.

Ascending the steps, we enter a portico with decorated walls and a roof of honeycombed pendentives, and pass into the open court beyond by large double doors covered with bronze, of which, unfortunately, the lower part has been stolen bit by bit. There is a tradition respecting these doors that they were lost in the sea, but recovered from it and brought to Bou-Medin by the prayers of the saint. It may almost be said that they are to Moor-

¹ (Arabic *Zilaidj*, whence the Spanish *Anulajos*.)

ish art what the doors of Ghiberti are to Italian, for purely decorative art was never carried higher. The design is a geometric interlaced pattern.

The mosque itself is worthy of the approach to it. It is divided into five naves, the two lateral ones being prolonged as corridors round the building, so as to enclose an open court—similar in fact to all other mosques in the place. The roofs of these naves are elongated vaults, decorated with plaster-work, in geometric patterns, without tracery, of a design much bolder than that on the rest of the building. It has at one time been painted—a very small fragment of the original painting gives an idea of the style adopted. The pillars are square and perfectly plain, but the whole superstructure, from the spring of the arches to the roof, is covered with most delicate lace-like work. So is the mihrab, and the koubba in front of it, the domed ceiling of which is of open work, with stained glass. The painting of this portion of the building is modern, and open to criticism.

The walls of the building have a richly sculptured frieze, but below this they have a very simple pattern excised in the plaster. The ancient member was of marble, but it got broken, and the present painted wooden pulpit was given by Abd-el-Kader.

On the two pillars in front of the mihrab are onyx slabs bearing long Arabic inscriptions. These are the original charters by which the lands around were granted in perpetuity to the mosque as *Habous* or inalienable property. The French Government has taken possession of these, and they have thereby incurred the responsibility of keeping the building in proper order. They have done a good deal of late years; had they begun sooner we should not have had to deplore the irreparable dilapidation of this precious monument.

The traveller should by all means ascend the minaret; he will be rewarded by a magnificent view, and he will be able to inspect closely the manner in which it was decorated.

To the W. of the mosque and attached to it is the **Medressa** or college, where talebs and scholars taught and studied at the cost of the endowment. In form it is similar to the mosque; the inner chamber has a fine domed roof of open woodwork, below which is a frieze of Arabic inscriptions, also of sculptured wood. The tile mosaics which adorn the entrance are remarkably fine. The building is isolated from the rock behind by a narrow gallery; this got filled up with earth, which entailed the destruction of the plaster-work on the walls.

On the E. side of the mosque is the vapour bath and its dependencies.

Mansoura, about $1\frac{1}{2}$ m. to the W. of Tlemçen, is hardly less remarkable than Bou-Medin, and the road to it passes by several interesting objects. It is better to visit it in the afternoon, as the light is then better for seeing the minaret.

Leave Tlemçen by the Fez gate, and about 100 yards farther on will be seen on the right the **Saharidj**, a reservoir 220 mètres long by 150 broad. It is built with walls of concrete 3·65 mètres high and about 1 mètre thick, strengthened by buttresses; it was constructed, we are told, by Abou Tashfin, the last king of the elder branch of the Abd-el-Ouadites, who was killed at the capture of the Meshouar, in 1337, in order to gratify as far as possible the whim of a favourite wife who wished to behold the sea and ships upon it. It has been partly repaired by the French, but cannot be used as a tank owing to some undiscovered leak. About 1 kil. farther on, the road passes close to what was once a beautiful horse-shoe arch called **Bab-el-Khamis**, formerly a gateway in the wall by which Abou Yakoub invested Tlemçen in the first years of the 14th century. It has now lost all its beauty by ruthless restoration. The large ruin which will be noticed on the slope of the hill to the left is an ancient mosque. Beyond the arch the road crosses the eastern wall of **Mansoura**. Its history resembles a tale from the *Arabian*

Nights. After Abou Yakoub had besieged Tlemçen four years he turned his camp into a city, and surrounded it with walls and towers, of which a large portion now remains. The walls are about 12 mètres high, and the towers 37 mètres apart, all built of concrete—a method which Pliny mentions as employed by the people of this country in his time. Though the walls have in places disappeared, the line of towers still marks their direction; they enclosed a nearly perfect square of 250 acres. Ibn Khaldoun says of it:—"It was filled with large houses, immense buildings, sumptuous palaces, and irrigated gardens. It was in 702 (1302) that the king built its walls and that he created a splendid city, famous both for its vast population, its extensive trade, and its massive walls. He included in it baths, caravanserais, a hospital, and a mosque with a lofty minaret." "In a short time," he adds, "it took the first place among the cities of Barbary." Mansoura was, however, evacuated when peace was made in 1306, and deserted till 1329, when it was again occupied during the second siege of Tlemçen. Abou el-Hassan, the Black Sultan, after the capture of that city, built a palace at Mansoura, which became a favourite residence. But in 1359 the Merenides were expelled from Tlemçen, and Mansoura was finally deserted. Excepting the walls and the mosque, little remains of its former greatness, which is accounted for by the materials of which Moorish cities are built. Hewn stone and marble were seldom employed, and the concrete and cement, with which their places were supplied, soon perish when exposed to the weather. The minaret of which mention has been made was built of hewn stone, and one side and a part of two others remain to this day. It is by far the most beautiful architectural monument of Moorish times in Algeria. Until lately it was in great danger of falling, but now it has been thoroughly strengthened and repaired.

The general character of the minaret resembles that of the *Kutubiya* at

Merakish, the *Beni Hassan* at Rabat, the original *Geralda* at Seville, and most other Maleki mosque towers. It was probably built, like the three others above named, with a series of seven or eight rooms, one above the other in the centre. In proportion and decoration it is a perfect match to them, but unlike anything else in Algeria. It resembles a European church-tower in position, being in the centre of the end opposite the mihrab, and there is an entrance into the mosque through it. Instead of an interior staircase it had a series of inclined planes or ramps up which a horse could mount to the summit. Æsthetically, the tower can hardly be too highly praised. The proportions are perfect, the decoration rich and original, or at least unlike anything else in the neighbourhood. The arches are either circular or pointed, and never horseshoe. Over the entrance arch is a stone projection or porch beautifully carved, and round the arch is written, *Abou Yakoub Yusuf bin Abd-el-Huk commanded this mosque to be built*. The height of the tower is nearly 40 mètres, and the upper part is ornamented with green and blue tiles. Nothing remains of the rest of the mosque except the outer walls, the space within which is oblong, 100 yards by 59.

A small village, with extensive and well-watered gardens around it, appears to occupy a mere spot in the immense area of the ancient city.

The falls of *El-Ourit* or the *Saf-Saf*, 5 kil. from Tlemçen, would be well worthy of a visit, even in a country where waterfalls abound. The road to Sidi Bel Abbès passes close under them, and the new railway runs just above.

Leave Tlemçen by the gate of Bou-Medin, and take the road which branches off to the right, about $\frac{1}{2}$ m. outside the town. It passes through the olive grounds and gardens below Bou-Medin, and winds shortly after to the right, round the corner of the hill, and turns again sharply to the left at a bridge, whence the falls are

best seen. They are unquestionably beautiful, though not from the quantity of water, or from their height, for though the total fall from the summit of the cliffs where the water is first seen, to the bottom of the ravine below the bridge, cannot well be less than 450 mètres, no single fall seems to be of more than 30; but rocks rise precipitously on either side from steep banks half hidden by wild cherry trees, while huge masses of calcareous tufa, hollowed out in fantastic caverns, cover the ascent in front. The rich green of sloping banks contrasts with the red masses of the stratified cliffs, springing from them, nearly 300 mètres hard and sharp against the sky-line; while an immense mass of perpendicular tufa closes in the valley on the left of the upper fall.

The visitor to the stalactite caves of the *Beni Aad* can drive 14 kil. along the road to Sidi Bel Abbès, but must leave his carriage and turn off to the right at the 165th kilometric stone. The caves are 5 kil. from the road, but there are Arab encampments at hand where mules may be procured if notice be given beforehand.

The following description of them is from *Through Algeria*:—

“Stalactites in every variety of size and form closed in my view above, around, below. No ceiling of human work could exceed in varied beauty the deep-fluted fringes and arches of pale yellowish hue that hung overhead; and not less exquisite were the clustering columns which, shooting up on every side, joined the vault above, or terminated midway in a group of glittering pinnacles. As we threaded our way through overarching aisles, with aisles and aisles seemingly extending into the darkness on either hand, the weird-like fantastic beauty of the scene conjured up my childish visions of fairyland.”

The main grotto extends for more than a kil. in length, but it has never been thoroughly explored, and it is supposed that there is a communication between it and other caverns farther down the hill. In visiting

this cave the traveller would do well to provide himself with a magnesian lamp, or if that is impossible, a good supply of blue light and red fire, which is easily procurable at Algiers. Facilities for visiting these caves can be obtained by application at the Sous-Prefecture.

The writer saw them illuminated by 200 Arabs carrying flambeaux, some of whom climbed up the highest stalagmites and waved their torches like malignant demons amongst the stalactites depending from the roof. Others ran backward and forward, through the grottoes and forest of columns around; the effect was singularly beautiful, and more like a fairy scene in a pantomime than anything in real life. Such a treat as this can only be enjoyed by special favour, and then the traveller must be prepared to pay a considerable sum in presents to the Arab attendants.

[An excursion may be made to **Sebdu**, and the mountains of the **Beni Snous**. An omnibus runs to and from the former place every day. The road is good; it passes through the village of Mansoura, and then mounts the steep hills south of Tlemçen. The only appearance of European colonisation beyond this is at

14 kil. The poor little village of *Terny*, situated in a plain, the soil of which is of very inferior quality. Mounting the hills above, we come to

22 kil. *Caravanserai of Ain-Ghoraba*, "The Spring of the Crow." Beyond, the country is more picturesque, and the road passes through the fine oak forest of *Titmokren*, containing park-like glades dotted over with magnificent trees.

35 kil. A *Maison Cantonnière* may be seen on the left side of the road; close to it is a large cavern, called by the Arabs *Ain-Yemam*, "The Spring of Pigeons," from the number of those birds which frequent it; this is the source of the river *Tafna*. The cave is divided into two stories by a horizontal partition of rock, looking almost like masonry: the lower part contains a pool of cool clear water, which flows

underneath the surface of the river bed for a couple of hundred yards, and then appears above ground as the *Tafna*. After heavy rains the entire cave becomes full of water, which rushes out in a magnificent cascade. The river then flows through a series of rocky gorges to the N.W., till it enters the rich plain of the *Tafna*, and eventually reaches the sea at *Rachgoun*.

Beyond the place just mentioned the valley becomes quite narrow, and the road descends into the plain of *Sebdu*, passing amongst cascades, streams of water, and rich irrigated land. On the opposite side of the plain may be seen the mountains of the *Beni Snous*, amongst which are a number of rounded mamelons, called by the French "The Twelve Apostles."

43 kil. **Sebdu**, 3000 feet above the sea.

This town is situated on the *Oued Guelt el-Kilab*, "Dogs' Ferry," and was once an important military station, with a redoubt and a large entrenched camp, around which a considerable village had sprung up, all the inhabitants of which were more or less dependent on the garrison for their subsistence. But in 1881 it was handed over to the civil authorities, the *Bureau Arabe* was removed to *El-Aricia*, 50 kil. farther S., and the garrison was gradually diminished, till now it does not number 50 men. There is no land available for colonisation; it all belongs to the Arabs, who cannot be induced to part with it, so that now *Sebdu* seems menaced with ruin. The only trade which is at all brisk is that of alfa, of which there are usually large dépôts waiting to be transported to the coast.

An excursion, which can be made on horseback, starting early in the morning and returning at night, three hours' ride each way, is to **Dhara** in the mountains of the *Beni Snous*, where is the magnificent house of *El-Hadj bel Arabi*, one of the kaid's of that tribe. The road passes through a fine forest of oak and over wooded hillsides, lighted up in early summer with a profusion of flowers of every colour.

The mother of the kaid is quite an

historical personage, being the widow of Si Mohammed bin Abdulla, Agha of the Beni Snous, who was murdered in 1856 by, or at the instigation of, Captain Doineau, Chief of the Bureaux Arabe at Tlemçen. That officer was sentenced to death for the offence, a punishment commuted into perpetual exile from France. This lady, who goes everywhere by the name of *El-Adjusa*, or "the old woman," is held in the greatest veneration throughout the country. She does the honours of her house with uncovered face, and with the most perfect dignity and cordiality. Travellers should not, however, venture to call upon her without consulting the administrator at Seb dou.]

ROUTE 24.

Oran to Tlemçen by Ain-Temouchent.¹

The first part of the road is by train.

Kil.		Kil.
..	Oran	70
6	La Sénia	64
20	Misserghine	50
31	Brédéah	39
36	Bou-Tlelis	34
47	Lournel	23
56	Er-Rabel	14
64	Rio Salado	6
70	Chabet-el-Laham	6
76	Ain-Temouchent . . . . .	..

The train runs for the first 6 kil. along the Algiers-Oran line, as far as La Sénia, where that to Ain-Temouchent branches off to the S.W., following the course of the old Route Nationale.

20 kil. *Misserghine*. Pop. 4077.

About 2 kil. from the *Sebkh*a of Oran, a marshy lake 38 kil. long by 8 broad, the waters of which are impregnated with salt.

Misserghine is one of the prettiest villages of the department, and the traveller, if he has time, will be glad to inspect the orphanage, founded by Père Abram, and conducted by the

¹ It will ordinarily be found more convenient to go to Tlemçen by Sidi Bel Abbés. See Route 23.

brothers of Nôtre Dame de l'Assomption. It contains about 130 boys and 90 old men, for whom the brothers receive a small allowance from the Department. The property is highly cultivated, and produces not only everything required by the establishment, but serves as a nursery garden for the country round. The fruit, vegetables, wine, and especially their celebrated Mandarin liqueur, are sent for sale to Oran. Near it is a female orphanage conducted by the *Seurs Trinitaires*, containing young girls and old women.

31 kil. *Brédéah*. Here is a copious spring from which Oran is supplied with water; the pumping engine was erected in 1880, and furnishes 100,000 cubic mètres of water *per diem*.

36 kil. *Bou-Tlelis* (pop. 756), a prosperous little town to the W. of the line.

47 kil. *Lournel* (pop. 1400), so called after a general of that name killed at Sebastopol; many fine gardens.

56 kil. *Er-Rahel* (pop. 755). From this village there is a road to *Hammam bou Hadjar*; see farther on. The *Sebkh*a or salt lake finishes here.

64 kil. The line crosses a salt stream, the *Rio Salado*, the *Flumen Salum* of the ancients, and the *Oued Malah* of the Arabs, which falls into the Mediterranean between Cape Figalo and Cammerata.

70 kil. *Chabet-el-Laham*.

76 kil. **Ain-Temouchent**. Pop. 4866.

The land here is watered by two streams, the *Oued Temouchent* and *Oued Senan*, which are also utilised as motive power for mills.

The village was built in 1851 on the ruins of a Roman town, called by Pliny *Oppidum Timici*, from the excavations of which many interesting relics have been obtained; amongst others a bas-relief of the death of Cleopatra, now at Oran.

A monumental Mairie has recently been constructed; the façade is of cut stone, with columns and arches, of gray marble obtained in the neighbourhood.

[On the road between this village and Ain-el-Arbâa, and 7 kil. from the latter, are the thermal springs of **Hamman bou Hadjar** (Bath of the Rock), which are much esteemed by the Arabs, and were used by the Romans, as ruins there attest. They have not been much used hitherto by Europeans owing to the want of accommodation. The water resembles that of Vichy; it gushes out of the ground in a column 1 mètre high, and 15 centimètres in diameter; its temperature is 80° Cent., 176° Fahr. At a short distance from it is a cold gaseous spring.

A hotel was opened here in the summer of 1889.]

An excursion may be made from this point to **Beni Saf** (see Rte. 28).

There are diligences between Ain-Temouchent and Tlemçen, and *vice versa*, in correspondence with each train. The journey occupies eight hours.

14 kil. *Ain-Khial*. Pop. 533.

23 kil. *Ain-Tekbalet*.

The small village of this name is about a mile from the road. By the roadside there is a small house and a fountain, and close to them are quarries of the beautiful alabaster known as **Algerian onyx**.

The discovery was made in 1849 by Signor Del Monte, of Oran, owner of the more famous quarries of Numidian marble near Kleber (p. 285). They are interesting not only on account of the beauty and value of the stone but geologically, as such deposits are not usually found in large masses,¹ but generally only in grottoes as stalagmite. This onyx was at one time much in demand, and may again become so, now that railway communication has considerably lessened the cost of transport. It was known to the ancients, and pieces of it may occasionally be picked up in the gardens at Rome. Columns of it, found in excavations in the mosque at Mansoura, may be seen in the mosques and museum at Tlemçen, 2·50 mètres in height, and 1·49 mètre in circumference. 1860

¹ Compare this with Ain-Smara, p. 210.]

The scenery around now begins to be of a more pleasing character, as the road ascends through wild hilly country to the plateau above the *Isser*. From this point a fine panorama opens out, comprising in the foreground the picturesque towers and walls of Tlemçen, and bounded in the distance by the range of the *Djebel Nador*.

44 kil. *Le Pont d'Isser*. 184 inhabitants. This village, situated in a fertile valley, makes little or no progress, owing to its unhealthiness. Great natural advantages in Algeria are frequently counterbalanced by the insalubrity of climate, so that the most fertile districts are often not the most prosperous.

At 7 kil. E. of this bridge, on the left bank of the *Isser*, is the alkaline spring of Hamman Sidi Abdeli; it springs out of a natural basin, near which are traces of Roman construction, and yields 150,000 litres per hour.

52 kil. *Negrier*. A small village of 184 inhabitants, founded in 1849, and named after a French general.

Crossing the *Saf-Saf*, and passing through highly cultivated country, the road ascends to the plateau on which Tlemçen is situated.

66 kil. **Tlemçen**. See p. 268.

ROUTE 25.

A Tour through the Centre of Oran to Mascara, Sidi bel Abbès, Tlemçen, Lalla Marnia, Nedroma, and Nemours.

This route is strongly recommended to travellers who do not fear the fatigue of travelling by diligence, and who wish to see something more of the country than is possible by railway. It contains all that is most interesting in the province of Oran, and the traveller, whose eventual destination may be Spain or Gibraltar, can so time his movements as to catch the Transatlantic steamer at Nemours.

It can be done in five days' actual travel from Algiers, viz.—

First day—Algiers to Perrégaux by train (Rte. 10).

Second day—Perrégaux to Mascara by train (Rte. 27).

Third day—Mascara to Sidi bel Abbès by diligence in eleven hours.

Fourth day—Sidi bel Abbès to Tlemçen by train.

Fifth day—Tlemçen to Nemours by diligence in fourteen hours.

First and second days as above stated.

Third Day.

The diligence starts from Mascara at 6 A.M. For the first 3 kil., as far as the small village of *St. Pierre*, it follows the road to Saïda; there the embranchment to Sidi bel Abbès takes place, and thenceforth the kilometric stones are numbered from 1 onwards as far as Lalla Marnia.

8 kil. The railway station and village of *Tizi*, situated in the wide and fertile plain of *Eghris*. After crossing this we enter the valley of the *Oued Fekan*, still very highly cultivated.

17½ kil. *The Barrage* of that river, embedded in trees; it irrigates the land between it and

21 kil. The village of *Fekan*, peopled by colonists from Alsace and Lorraine. The road, which has hitherto been S., now turns nearly W., and closely follows the bed of the river, which is richly wooded, especially with large Betoum trees (*Pistachia Atlantica*).

26 kil. The river here falls to a considerably lower level in a fine cascade.

33 kil. *Les Trois-Rivières*, the junction of the four streams the *Oued Fekan*, the *O. Traria*, the *O. Houenet*, and the *O. Melrir*, the united waters of which now form the *Tafna*. After crossing this the road leads through picturesque gorges and more or less barren hillsides to

51 kil. *Mercier-Lacombe* (pop. 904), a very prosperous village, named after a late director-general of civil affairs, who married the daughter of Mr. Bell, H.M. Consul-General. A market is

held here every Tuesday. The diligence stops for breakfast at the *Hôtel de Commerce*.

The whole distance between this and Sidi bel Abbès is one continuous stretch of corn, the uniform green of which, in early summer, is only diversified by fields necessarily left fallow, and by the most gorgeous effects of colour caused by wildflowers amongst the growing corn. The country is everywhere well watered, and is one of the richest in the colony.

59 kil. *Boulet* (pop. 262), formerly called *Mulai Abd-el-Kader*, a small centre of European colonisation, near the marabout of the saint; there are only a few farms, a school, and the inevitable canteens. Some business is done here in alfa and tan-bark.

71 kil. *Baudens*, formerly called *El-Kaar*, may be seen a few kils. to the S., the name was changed to do honour to an army surgeon.

74 kil. *El-Greiz*—Relay.

88 kil. *Sidi bel Abbès*, see p. 282.

Fourth Day.

Sidi bel Abbès to Tlemçen by railway.

Fifth Day.

From Tlemçen a diligence goes to Lalla Marnia and Nemours in one day. Leaving by the gate of Fez, we traverse the ruins of Mansoura, and at

184 kil. the last trace of European colonisation is passed. The road now goes through an undulating country, in which there is a little sparse Arab cultivation, and a good deal of scrub, in some places attaining almost the importance of a forest. It is difficult to find any salient points to note; the following are a few, of no particular interest, save as landmarks:—

192 kil. The *Maison Cantonnière* of *Beni Mister*, near which is an Arab village and a fine grove of olive trees.

194 kil. A stone marking the spot where a Spaniard was assassinated by Arabs in August 1885.

205 kil. *Ain-Sabra*, a stream of clear water, and the Relay.

210 kil. The *Maison Cantonnière* of *Oued Barbata*. Here begins the forest,

if such a name is applicable, of *Tagemsett*, composed principally of Thuya trees (*Calitris quadrivalvis*), which extends for the next 10 kil.

222 kil. *Maison Cantonnière*.

223 kil. The road crosses the **Tafna**, one of the most considerable rivers in the province; its principal source is from a cavern in the mountains overlooking the plains of Seb dou (see p. 276).

230 kil. The old road to Tlemçen branches off to the N.E. at this point. The country here is remarkably fine, park-like, and dotted over with olive trees.

231 kil. **Lalla Marnia** (pop. 1307), more properly *Lella Maghnia*, from a female saint, whose tomb is here.

This is a very important strategical and commercial position, only 14 kil. from the frontier of Morocco and 24 kil. from the Moroccan city of Oudjda. It has been identified as the ancient *Syr* by a military column, which fixes the distance between it and *Pomaria* (Tlemçen), and to *Siga* at the mouth of the Tafna.

Marnia is an open village, protected by a redoubt, which contains the garrison and military buildings. It is entirely under military government.

It is situated in a rich and fertile district, watered by the barrage of the O. Alfou. The town is 365 mètres above the sea.

[34 kil. S. are the disused mines of *Ghar Rouban*, see p. 293.]

Henceforth the road, which has hitherto run nearly E. and W., now turns to the N., and the kilometeric stones are numbered from Marnia onwards.

5 kil. The *Oued Mouia* is crossed by a wooden bridge. Near this are some thermal springs, much frequented by the inhabitants of the district.

10 kil. The *Maison Cantonnière* of *Sidi Abdulla*. Behind it are two caves with fine stalactites, and a quantity of guano deposited by the numberless bats which frequent them.

17 kil. A calamine mine has lately been discovered here.

The road now ascends the steep range of hills in front, and from the highest point or col, *Bab Tazza*, 820 mètres above the sea, and 20 kil. from Marnia, a splendid view is obtained both towards the N. and S. It dominates the plains of Nedroma, and when the weather is fine one can see as far as the Zaffarine Islands and the Snassen Mountains, within the frontier of Morocco. The inhabitants of this district are Berbers.

From this point the road descends, winding amongst the valleys, till it reaches

32 kil. **Nedroma** (pop. 4534). A most interesting Berber city, situated on the lower slope of the hill which we have just passed, with a magnificent panorama of olive groves and fertile fields in front of it, and rich gardens around. It is exceedingly ancient; its original name was *Medinet el-Botaha*; but in the middle of the 13th century it was rebuilt by Sultan Gho-marasan of Tlemçen, who changed this to its present one, supposed to be a corruption of *Dthud Roma*, "opposite Rome," or perhaps "a barrier against the Christians." The inhabitants speak only Arabic, but their Berber origin would be manifest even if historical evidence of it did not exist. The remarkable beauty of the women is a distinctive characteristic of the Berber race, and here even the passing traveller has an opportunity of judging for himself, as the unmarried girls do not veil their faces. The houses are large, well built, and clean, and the town is surrounded by crumbling walls of concrete, crowned by a ruined citadel, exactly like those of Honai (p. 292).

Until the last few years it was exclusively native, but now a few Europeans have been attracted to it by the fertility of the land and the traffic caused by the new road; the bureau of the administrator of the district has been transferred here from Nemours, and in a year or two it will probably lose its peculiarly Berber character, which now makes it so interesting.

After passing for some distance through the plain the road enters the rich valley of the *Saf-Saf* or river of

Trara, one continuous series of market gardens and orchards.

At about 1500 mètres from Nemours there may be seen, in the bed of a river to the left, a pyramid surrounded by an iron railing. This covers the remains of the troops who perished at the combat of Sidi Brahim, 10 kil. to the E., in 1843. This was one of the many gallant but unfortunate actions which threw lustre on French arms during the first years after the conquest.

A column under Colonel Montagnac, consisting of 66 cavalry and 350 infantry, were enticed by Abd-el-Kader into a skilfully contrived ambuscade near Sidi Brahim, and almost completely annihilated; one company of reserves managed to force its way nearly to Nemours, but, despite the assistance afforded by the feeble garrison of that place, it shared the fate of the rest. Only one corporal and twelve men of the entire force were rescued.

Abd-el-Kader himself surrendered here two years afterwards.

48 kil. **Nemours** (see p. 293).

ROUTE 26.

From St. Barbe de Tlélat to Sidi bel Abbès by Railway and on to Ras el-Ma.

Kil.	Names of Stations.	Kil.
..	ST. BARBE DE TLÉLAT . . .	152
6	St. Lucien . . .	146
16	Lauriers Roses . . .	136
29	Oued Imbert . . .	123
36	Les Trembles . . .	116
42	Sidi Brahim . . .	110
52	SIDI BEL ABBÈS . . .	100
58	Sidi Lahsen . . .	97
64	Sidi Khalid . . .	88
71	Bou Kanéfis . . .	81
75	Tabia . . .	77
83	CHANZY . . .	60
100	Si Sliassen . . .	52
115	Magenta . . .	37
122	Les Pins . . .	30
129	Taten-Yaya . . .	23
143	Bedeau . . .	9
152	RAS EL-MA . . .	..

This line was constructed by Mr. Harding, of Paris, and after its completion it was made over to the Compagnie Ouest Algérien. The works commenced in the spring of 1875, and terminated in May 1877. The country through which it passes is rich and tolerably well cultivated; but one great object in making the line was to tap the alfa districts and bring that produce to the coast. The principal goods carried by it are alfa fibre, wheat, and tan bark. The country slopes gradually up to Bel Abbès, and is picturesque. The line starts from the Tlélat station of the P. L. M. Company (see p. 189).

1 kil. to E. of line is the Marabout of Sidi Bel Khair, after which it follows the general direction of the high road from Oran to Sidi Bel Abbès, crossing it on several occasions.

6 kil. *Arrêt of St. Lucien.* To the E. of the line is a village created in 1876, and named after a child of General Chanzy, who was accidentally killed at Algiers two years before.

8 kil. To the E. are the Marabouts dedicated to Sidi Berafor, after which the country becomes more hilly.

9 kil. The line crosses the high road at 38 kil. from Oran.

11 kil. To the E. is a barrage on the Oued Tlélat, constructed in 1872 by military prisoners. It waters a comparatively small area.

13 kil. To the E. the Marabouts of Sidi bin Taib and S. Saiah.

14 kil. W. of line. Djenan el-Meskine, *the garden of the beggar*, a well-watered plantation of fruit trees on the high road.

16 kil. Station of *Lauriers Roses*. To the E. is the Merabet ez-Zeidj; to the W. an old telegraph station and the Marabout of S. Mohammed. The village of Lauriers Roses is seen to the W. It consists of but a few houses along the high road.

22 kil. W. An Arab village with a Marabout on the top of an isolated mamelon.

22½ kil. *Oulad Ali*; a pretty large Arab market is held here every week.

23 kil. The house of the Kaid of the Oulad Ali to the W. After which

the line enters the col of the Oulad Ali.

25 kil. The crossing station of the *Oued Imbert*. This is the highest point on the line, being 508 mètres above the level of the sea. The route to St. Denis du Sig branches off from this place. The country now becomes much more fertile than it has been.

29 kil. Station of *Oued Imbert*, a small village on the W., beyond which is the Marabout of S. Machou.

36 kil. *Arrêt des Trembles*. The village is situated on a hill to the E. between the line and the high road; the trees, which give their name to the place, are on the banks of the Mekerra, which flows past the village.

36 kil. The line here crosses the Oued Sarna, and in this neighbourhood the most considerable excavations and embankments in its whole course have been executed. The mountain of Thessalah is seen about 20 kil. to the W. The plain at its eastern base is covered with rich and flourishing farms.

40 kil. To the E. on the Mekerra are the farm and mill of the late M. Bleuze, who, with his housekeeper, was murdered by a party of Arabs in 1875. One of the assassins was executed at S. bel Abbès in April 1877. The murderers were Arabs to whom he had lent money and subsequently dispossessed of their property.

42 kil. Station of *Sidi Brahim*. The village is an important one, situated on the high road, about a kilomètre to the E. The tomb of the saint, which gives its name to it, is on a hill some little distance beyond.

46 kil. *Le Rocher*. Several isolated farms and orchards on a bend of the Mekerra form a district rather than a village known by this name. The land is extremely rich and well cultivated.

49 kil. To the E. of the line is a mausoleum surrounded by trees, built by the Marquis de Massol for himself; he was not, however, buried here. Beyond, to the E., is the village of Mulai Abd-el-Kader, whose koubba is on the opposite bank of the river, farther E.

50 kil. Cemetery of Bel Abbès, surrounded by cypress trees.

52 kil. Station of *Sidi bel Abbès*. Pop., including outskirts, 18,516.

This town occupies the spot where a fort formerly stood, which was erected by the French as a *dépôt* for provisions on the road between Tlemçen and Mascara. It is situated in a plain watered by the *Mekerra*, and is entirely modern. The country around is clothed in the richest verdure, and the soil is exceedingly fertile, producing, among other crops, tobacco of excellent quality; the wheat of this district is in high repute throughout the colony and even in France.

In 1845 an attempt to capture the fort was made by a band of Arabs of the Oulad Brahim tribe, who gained admittance under the pretence of desiring to perform their devotions at the koubba of the Marabout Sidi bel Abbès, which adjoins the fort. This effort was frustrated, and the Arabs beaten off with great slaughter. With this exception, the history of Sidi bel Abbès is entirely free from warfare and bloodshed, unlike that of most of the French settlements in Algeria.

The town is surrounded by a ditch and bastioned wall, through which entrance is obtained by means of four *gates* on the roads to Oran, Tlemçen, Daya, and Mascara.

The wide street running between the north and south gates cuts the town into two equal parts; that on the west is the military quarter, and contains barracks and other subsidiary buildings sufficient to accommodate 6000 men. Indeed, this may be regarded as one of the most important strategic positions in the province.

It is also the headquarters of the Foreign Legion; the band is said to be one of the best in the French army, and it enlivens the station by playing several times a week.

From a business point of view, Bel Abbès is nearly the most considerable town in the interior of the colony; the land in the neighbourhood is excellent, and it is the principal centre of the alfa trade; 50,000 tons are

despatched hence every year, which is about a quarter of the entire quantity of this fibre imported into England.

In summer one can walk all over the town and its immediate neighbourhood in the densest shade. Canals carry the water of the Mekerra through the town, and a supply may anywhere be obtained by digging a few feet below the surface.

At the *Porte d'Oran* a large Arab market is held weekly for the sale of vegetables, fruit, cattle, and wool.

The site of Sidi bel Abbès was formerly a swamp, but the plantations have drained it, and now it is perfectly healthy. The climate is generally cool and bracing, it being 475 mètres above the level of the sea. The environs are more thickly peopled than the town itself; the largest village is Perrin; there is another at the gate of Tlemçen; there is a Spanish village at that of Mascara, and a negro one near the gate of Oran.

58 kil. Station of *Sidi Lahsen*. The village is on the opposite side of the river; most of the colonists are of Alsatian or German origin.

64 kil. *Sidi Khalid*, a miserable village near the junction of the high roads to Tlemçen and Magenta, but the land is rich and capable of irrigation.

71 kil. *Bou Kanéfis*. To the E. of the line before arriving is a native agricultural penitentiary. The village is surrounded by good land, but it does not seem to have recovered from its almost total destruction, some years back, occasioned by the rupture of the barrage at Tabia, which has never been rebuilt.

75 kil. *Tabia*, a village which, though of recent construction, is doing well.

The barrage before mentioned was constructed to utilise the waters of the Mekerra for the irrigation of the plain of Bel Abbès; but the site was badly chosen, and when full the water cut through the bank, just as occurred at Sig in 1885, and carried away the whole construction, with disastrous results.

[The railway to Tlemçen branches off here, traversing the plain of Tiflès in a direct line to Ain-Tellout, thence passing Lamoricière and Ain-Fezza, and passing just over the Cascades of the Saf-Saf near Tlemçen. See Route 23.]

83 kil. Passing through a narrow gorge, the line enters the highly cultivated and well-watered valley of *Sidi Ali bin Youb*, now called *Chanzy*, after the popular and distinguished governor-general of that name, the last who combined the civil and military authority in this colony.

The village is about a mile from the station on the right bank of the river. A few hundred yards beyond it are the thermal springs of *Ain-Skoun*; the temperature is 77° Fahr., and they yield an abundant supply both for drinking and irrigational purposes. There are traces of a Roman piscine; indeed, numerous signs of the Roman occupation are still visible, and the two pillars in front of the Cercle Militaire at Bel Abbès were found here.

Near Chanzy there is a fine quarry of dark-coloured marble.

[Roads branch off to *Tenera* and to *Telagh*, villages on the way to *Daya*, the latter till lately a smala of Spahis, but now a fairly prosperous village.]

Leaving Chanzy, the country becomes more mountainous and wooded, and, especially in the forests of *Djebel Stissen* and *Toumlet*, the scenery is fine.

100 kil. *St Stissen*. The site of a projected village. Beyond the station there is only a small canteen and some huts; but the traffic here is considerable, as there are roads leading to *Daya* and *Telagh* on the E., and to *Lamoricière* and some important alfa districts on the W.

115 kil. *Magenta*, or *El-Haceiba*, a village created by General Chanzy, but which has never prospered. For a long time it was so unhealthy that the troops were not allowed to pass the summer here, but were removed to the higher and healthier position of *Daya*,

16 kil. S.E. It is now much more healthy, and as the surrounding lands are fairly good the railway may bring it prosperity.

122 kil. *Arrêt des Pins*, a small station in the valley, near a barrage built for Magenta, but constructed in a place where the water filters through the ground and cannot be retained. There is no traffic here.

129 kil. *Taten - Yaya*. The line having now left the region of forests, enters fairly on the high plateaux. This will probably be an important station for the alfa trade but nothing more, as the land offers no inducements for colonisation.

143 kil. *Bedeau*. Near the station is a small redoubt, established here during the last troubles in the S. It is proposed to create an industrial village here, which, as water is abundant, may prosper as long as the alfa trade continues. Indeed, it is to this precious fibre that the railway owes its existence, and the province of Oran in a great measure its prosperity. As far as the eye can reach the only vegetation of the high plateaux is that of thickly scattered tufts of alfa grass; it is picked generally by Spaniards, who live for months at a time in these solitudes, and eventually despatched for shipment to Oran and Arzeu.

[Roads branch off hence to *Daya* on the E., to *Sebdaou* on the W., and to *El-Arricha* on the S.W.]

152 kil. *Ras el-Ma*. The terminus of the line, at the foot of *Djebel Beyghra*, a mountain which dominates the high plateaux, and on the summit of which an optic telegraph station has been established. The view thence is one of utter desolation; with the exception of the line itself, alfa and artemisia, not a sign of habitation or of animal or vegetable life is visible. This forms the western limit of the concession granted to the Cie. Franco-Algérienne. It is hoped that much of the traffic from the S. of Morocco may come here, as it is on the shortest and most direct road from Figuig.

ROUTE 27.

From Arzeu to Mascara, Saïda, Mecheria, and Ain-Sefra by Railway.

Kil.	Names of Stations.	Kil.
	Arzeu	454
7	Saint-Leu	447
17	Port aux Poules	437
21	La Macta	433
33	Debrousseville	416
51	Perrégaux (Junction)	203
62	Barrage O. Fergoug	392
71	Oued el-Hammam	383
80	El-Guetna	374
88	Bou Hanefia	366
100	Tizi-Mascara	354
107	Froha	347
113	Thiersville	341
127	Traria	327
140	Charrier	314
145	Franchetti	309
166	Nazreg	288
171	Saïda	288
182	Aïn-el-Hadjar	272
191	Bou Rached	263
206	Tafaroua	248
215	Kralfallah	239
224	Muley Abd-el-Kader	230
230	El-Beïda	222
236	Motzbah-Sfid	218
248	Tin-Brahim	206
257	Assi el-Madani	197
271	El-Kreïder	183
285	Bou-Guetonb	169
299	Rezaina	155
313	Bir-Senia	141
323	El-Biod	131
336	Krebazza	118
352	Mecheria	102
385	Naâma	69
420	Mekalis	34
454	Aïn-Sefra . . . . .	..

Arzeu. Pop. 5127.

Arzeu was occupied by the Romans under the name of *Arsenaria*; it was destroyed by the Arabs on their invasion of Africa, and again built by the sovereigns of Tlemçen. Under the Turks it was the principal place of exportation in the province. During the Peninsular War nearly 300 vessels a year conveyed grain and cattle thence for the use of the English army.

It was besieged and captured by Abd-el-Kader in the year 1831; and in 1833 taken by the French under General Desmichels; and, after again changing hands, was finally ceded to France by the Treaty of the Tafua in 1837.

It occupies a very favourable situation ; its harbour is naturally the best in Algeria, and has been further protected by a breakwater, running nearly N.W. and S.E. The harbour has an area of 140 hectares, and the break-water a length of 300 mètres. This place is the natural outlet for the produce of the rich valleys of the Sig, Habra, Mina, and Chélif, also the *entrepôt* for the trade of Relizane and Mascara, as well as of the Sahara.

On the 20th December 1873 the governor-general signed a concession, granting to the Compagnie Franco-Algérienne the permission to construct a railway from Arzeu to Saïda, with the privilege of *exploitation* of alfa in the high plateaux of the subdivision of Mascara, but without any guarantee of interest. Some of the most important conditions of this grant are :— The Company have the exclusive privilege of collecting alfa over nearly a million acres of land, without prejudice, however, to the Arabs' right of pasturage there. It pays to the State a fixed rate of 15 centimes on every ton exported, as far as 100,000 tons per annum, above which the rate is 25 centimes. It has the further privilege to take from the Government forests whatever wood may be necessary for their works, on payment of 2 f. per cubic mètre for pine, thuya, and juniper, and 4 f. for oak. The concession to last for ninety-nine years. It is generally reported that this enterprise has not proved a very successful one, and it is probable that the Company would have found it difficult to continue its operations but for the impulse that Bou Amama's insurrection gave it. The State gave a subvention of six million f. to enable it to continue the line right into the desert, and pays large sums for the transport of troops and military stores.

Formerly the inhabitants suffered from a want of good water, which caused the town to become almost deserted, but now the rain-water has been collected in the ravines of *Ste. Léonie*, *Tazout*, and *Guessibâ*, in underground galleries, and brought to Arzeu by a cemented conduit of 12 kil. in length.

The fortifications consist of a new citadel and two old forts. The first mentioned was completed in 1863, and is provided with reservoirs, barracks, etc. It is sometimes used as a political prison. The refugees of Carthage, 600 in number, were confined here in 1874.

In the vicinity are the famous quarries of **Numidian marbles**, which are, however, more easily reached from Oran. At Mefessour, on the road from that town, is the small village of *Kleber*. Above this rises an imposing mountain, marked *Djebel Arousse* on the map, a corruption no doubt of *Djebel er-Roos*, or "Mountain of the Capes," but more generally styled by the colonists *Montagne Grise*, from its arid gray appearance. The central portion, 2000 feet above the sea, forms a level plateau, with a superficies of from 1500 to 2000 acres, consisting of an almost uninterrupted mass of dolomitic marble and breccia, mixed with deposits of manganitic iron ore. This is beyond all doubt one of the places whence the celebrated **Marmor Numidicum** was obtained by the ancient Romans ; and as regards quantity, beauty, and variety, these marbles are probably the finest that the world contains.

The original colour of the rock was creamy white ; in the extreme eastern part, where the amount of iron is small, it exists very much in its natural condition, only somewhat stained with iron, which communicates to it a tint resembling ivory. In conjunction with this is a rose-coloured variety, which is capable of being worked either in large masses or in the finest ornamentation. Here all the rock is of a uniform structure, marble in fact, as distinguished from breccia. In the west of this plateau, however, there appears to have taken place some great earth movement ; the whole of this side of the mountain has been crushed by pressure into fragments varying in size from large angular masses to the merest dust. This disintegrated mass has subsequently been cemented together by

the infiltration of water; the fragments have retained to a certain extent their original rose or yellow colour, while the matrix has been stained of the deepest brown or red owing to the iron oxide and the manganese which has been carried by the water through the fissures, the whole thus forming a beautiful breccia of endless variety and colour. The matrix is as hard as the fragments it contains, so that it takes a uniform polish throughout its whole surface.

Between these two extreme varieties, viz. the white and rose marble on the east, and the breccias on the west, there are many others, such as the well-known yellow called *Giallo Antico*, a variety which the owner has named *Paonazza*, from its resemblance to a peacock's plumage, and a deep red species, somewhat brecciated, and greatly resembling, if not identical with, the famous *Rosso Antico*. All these owe their colours to the iron and to the greater or less amount of crushing force to which they have been subjected.

These splendid quarries belong to the family of the late M. Del Monte of Oran. The writer obtained some blocks with which the English Church at Algiers has been decorated.

[There is a steam tramway to the Salines of Arzeu for the purpose of bringing in the salt collected there.]

The railway of the Compagnie Franco-Algérienne is a narrow gauge one, the width of the rails being only 1·10 m.

At first the line runs between well-cultivated plains and the sea.

2 kil. It crosses the Oued Magoun, a river which passes between the villages of Kleber and Ste. Léonie. A barrage has been constructed on this stream capable of containing one million cubic mètres of water, but hitherto the soil has been found too permeable to retain it.

7 kil. To the S. is seen the village of *St. Lou, O*. Close at hand is the Berber village of *Botioua* or old Arzeu, the ancient Roman *Portus Magnus*,

mentioned by Pliny, where very interesting ruins still remain.

The most remarkable of these are the ruins of a Roman house, of which the interior disposition is still quite visible. The rooms were paved with mosaics, and in the centre was a court with two *impluvia* to receive rain-water. The most important of these mosaics have been transported to the Museum at Oran.

Shortly afterwards the fertile land gives place to dunes of sand covered with low scrub, amongst which the Forest Department has planted a large number of Aleppo pines, which seem to be thriving.

17 kil. *Port aux Poules*. A hamlet at the small natural harbour formed by the estuary of the Oued Macta.

21 kil. *La Macta*. This is a small village close to where the railway and the high road cross the Oued Macta by contiguous iron bridges. This river has only a course of 4 kil. It rises in the marshy ground to the S. called the Plain of the Macta, and after a sluggish course, caused by the bar at its mouth, falls into the sea at the Port aux Poules. By some this river has been identified as the ancient *Mulucha*, or *Molochath*, which is more generally considered to be the modern *Moulouia*, on the frontier of Morocco. The country round is extremely feverish in the summer months, but not so in winter, and the sport to be had is excellent. The plain abounds in antelope, but, owing to a superstition that a holy man's life was saved by one of them, the Arabs have the greatest objection to their being shot. In addition to these there are bustard, wild ducks, and partridges in abundance. The river is renowned for the large size and excellent quality of its eels.

32 kil. The line here crosses the Oued Tinn. This is a continuation of the Oued Malah, which comes from near Mascara, and falls into the marsh of the Habra. The only way to drain and utilise this country is by cutting a bed for the Macta through this plain, and draining the country by canals on either side into it.

38 kil. *Debrousseville*. It was intended to create an important village here, in the centre of M. Debrousse's concession, but the locality is most unhealthy, and the scheme is never likely to be carried out. The Spaniards have instituted an unusual commerce here of late years, the collection and exportation of snails. Two million kilos. are said to be exported annually, which realise about 20 f. per 100 kilos.

After leaving this the line passes through the skirts of the forest of Mulai Ismael, and then reaches the line from Algiers to Oran at

51 kil. *Ferrégaux* (see p. 188).

After leaving Perrégaux the line passes through a narrow valley, bounded by bare and sterile hills, through which winds the river Habra, in a broad bed, overgrown with tamarisk and olive trees.

55 kil. *Col des Juifs*. The valley here widens, and the difficulties of the railway commence. There are here heavy earthworks, and the first of a series of bridges of considerable size, which the company have been forced to make for the passage of the Habra.

62 kil. *Le Barrage* (see p. 188).

An excellent view of the barrage is obtained from the train. After its destruction in 1881 it was restored by the State, but no sooner was the water allowed to collect than infiltrations were perceived in the rock on which the dam abuts. This necessitated the construction of an immense counterfort at the foot of the hill, having a length of 55 mètres, a height of 20 mètres, and an average thickness of 10 mètres.

Beyond this the line crosses and recrosses the Habra, the country becomes more picturesque and better wooded, and eventually emerges into the fertile plain in which it is situated

71 kil. *Dublineau*, formerly *Oued el-Hammam*. The name was changed in honour of a colonist of that name who was besieged in his farm by a number of Arabs, whom he repulsed after a heroic resistance. This is a prosperous village situated on the high road between St. Denis du Sig and Mascara,

which is here joined by the road from Perrégaux.

[There is a road to Mascara from this point. It crosses the mountainous chain called by the Arabs the *Djebel Tifroura*, and by the French soldiers *Crève-cœur*, and continues along the side of a valley thickly wooded with pine and oak trees. The highest part of the whole route, about 12 kil. beyond Oued el-Hammam, is 2200 feet above the sea, and commands an extensive view.]

80 kil. *El-Guetna*. About a kil. to the N. of the station, and on the W. side of the river may be noticed an Arab house and a Marabout. This is the birthplace of Abd-el-Kader.

88 kil. *Hamman Bou Hanefia*. The railway here leaves the river, which takes a westerly direction. On its banks, about 2½ kil. from the railway station, are the hot water springs of this name; they have a temperature of 136° Fahr., and issue from the base of a small hillock. Immediately alongside are cold water springs, coming apparently from the same ground; the water is slightly saline.

These waters are much appreciated by the Arabs, and considerably used by them, but are rarely visited by Europeans, except by some of the Mascara families, who occasionally make a picnic visit.

The baths for Europeans and Arabs are kept quite distinct; they are fairly commodious, but the caravanserai adjoining offers but few temptations to remain, and unless notice be given beforehand one can count on little or nothing for man or beast. On the mamelon whence the springs burst there is a small natural well, now partly filled up. The heat within is very considerable, and the strong smell of gas renders a long stay in the well impossible. It is common to find small birds dead at the bottom, evidently suffocated by the gas. A few hundred yards higher up there is a Roman burial-ground, some of the inscriptions still exist; and still higher up, though only separated by a narrow

valley, are the remains of a town, Θ , probably a sanitarium attached to the hot springs. It was walled round even on the river side; the postern door and steps leading to the river are quite distinct. The entrances E. and W., and in fact the streets and some of the houses, are distinguishable. It is believed that the town was destroyed by an earthquake. Nothing of special interest has been found. The railway now mounts a steep gradient, passing by barren clay hills almost without sign of vegetation. This passage was the most troublesome of all the line, owing to the nature of the soil. The works were several times more or less carried away by heavy rains.

100 kil. At Col *Tizi* the extensive plain of *Eghris* is entered at about 12 kil. W. of Mascara. When colonised this plain should give a heavy traffic to the line, though the supply of water is but scanty, and the depth at which it is found is very variable.

A small village has been constructed here, and a branch line of 13 kil. leads to

Mascara. Pop. 15,543. Seat of general commanding subdivision, and of the various subsidiary military and civil offices.

Mascara is finely situated on a slope of the plain of *Eghris*, 1800 feet above the level of the sea, on two small hills separated from each other by the bed of the *Oued Toudman*, which is crossed by three stone bridges.

The general aspect is somewhat imposing, giving the idea of an important and handsome town. The Arabic name of the place is *Mäaskera*, which is a corruption of *Omm-el-Asakir*, the Mother of Soldiers. It was built by the Turks on the site of a Roman colony, and during the first years of the French conquest was the favourite residence of the Emir Abd-el-Kader, who was born at *El Guetna*, 16 kil. S. of it.

After the rupture of the treaty Desmichels, Marshal Clauzel recommenced hostile operations and marched against Mascara at the head of a force, one division of which was commanded by the Duc d'Orleans. After a stout resistance the Arabs were dispersed, and

the French army entered the town on the 6th of December 1835. The Emir withdrew to the South, taking his family and all his wealth, and three days later Marshal Clauzel retreated to Oran.

Abd-el-Kader returned after their departure, but again retired before General Bugeaud, who finally took possession of the place in 1841. From this date until 1843 there was constant warfare between the French and the Arabs under Abd-el-Kader, who at the end of that year took refuge in Morocco, after which many of his followers submitted to the invaders.

Mascara is now completely a French town, surrounded by a wall of the ordinary type, with the usual squares and rectilinear streets, public buildings, etc.; hardly a vestige remains of the city of Abd-el-Kader. The only building of any interest is a disused mosque, where the great Emir was wont to preach; it is now used as a powder magazine and storehouse for grain. Another mosque was for years used as a parish church; it is now occupied as a school. The barracks and hospital occupy a prominent position in the town.

There is a purely Arab village 3 kil. to the W.

The principal industry of the place is wine, which is celebrated throughout the colony, and eagerly bought up by agents of Bordeaux houses, especially the white variety. Vineyards are being planted in every available spot.

[An excursion may be made hence to Tiaret, Frenda, and so by railway to Relizane. See Rte. 22.]

107 kil. *Froha*, a little village in the midst of the plain, whence there is an excellent view of Mascara, and the range of hills on which that town is situated. The line here crosses the main road from Mascara to Saïda, and, winding round a low spur which separates the Plain of *Oued Traria* from that of *Eghris*, recrosses the road, and at 126 kil. arrives at the village of *Oued Traria*, which does not show much sign of prosperity, and at pre-

sent bears the reputation of being unhealthy. A short distance farther on the valley of the *Oued Saïda* is entered, which is here narrow but well watered and fertile, and widens out on passing 113 kil. *Thiersville*.

127 kil. *Traria*. At 13 kil. E. of the village and at 35 from Mascara are the ruins of *Benian*, Θ , the ancient *Tasacora*. On ascending the right bank of the *Oued Traria* the first thing seen is a mausoleum, of which little more than the podium now exists; it is of finely cut stone, almost without cement. The approach to the city was through an avenue of tombs, now completely destroyed. The outline of the city is perfectly visible; it was not large, about 220 mètres square; the gates were guarded by towers.

140 kil. *Charrier*.

145 kil. *Franchetti*, the most important village between Mascara and Saïda. Some kilomètres higher up there is a barrage, which serves this village; and near it, about 1 kil. E. of the road, is *Aïn-el-Hammam*, a pond of hot saline water with a taste of sulphur, and with constant bubbling, from the escape of carbonic acid gas. This is very much frequented by the Arabs, especially by the women.

165 kil. *Nazreg*, a very prosperous village, of rather recent creation, with good land and abundant water for irrigation. The land is here fairly settled and cultivated all the way to

171 kil. *Saïda*. Pop. 4039.

Since the opening of the railway this place has sprung up from being simply a military post, and the usual small town or village that always settles round a permanent military establishment, to be a town of some importance and with a good deal of movement. It is pleasantly situated between two small streams, on a slight elevation looking N.; altitude 807 mètres. Thanks to the railway made by the Cie. Franco-Algérienne and to their important exploitation of the *alfa* lands to the S., Saïda has made more progress during the few past years than any town in the province. A short distance to the S. of the town the limit of the Haut Plateaux is clearly defined.

[*Alaeria*]

It is here that the old Arab town was situated. It was occupied and fortified by Abd-el-Kader, and held by him for a considerable time during his struggle with the French.

The ground here rises so abruptly that it looks impossible for the railway to pass, and for some time it was not considered practicable; but to avoid a very long detour to the W. it was decided to face the difficulty, and by a system of curves and counter-curves the difficulty was surmounted. There are many Roman remains in the neighbourhood of Saïda, Θ ; the most important is 2 kil. distant, above the ravine of Sidi Salim, exactly opposite the old Saïda of Abd-el-Kader, on a plateau called *Tidernatin*, which forms part of the first steps of the High Plateaux. Here is a sort of fortified camp, protected in part by a natural scarp, and more strongly fortified by a wall and bastions, on the narrow isthmus by which alone access is obtained to it from the country behind. It was in fact the *oppidum* or refuge for the population in case of danger.

[From Saïda there is a track to *Daya*, which lies about 80 kil. to the W.; and another to *Frenda* and *Tiaret*, 150 kil. distant to the N.E.]

182 kil. *Aïn-el-Hadjar*; altitude 1024 mètres. It is here that the Cie. Franco-Algérienne have established their general depôt for *alfa* and their hydraulic presses. The establishment is very considerable, and capable of turning out fully 30,000 tons per annum. Before they commenced the district was utterly uninhabited, but now there is a thriving village. The climate is rather trying, owing to the great extremes of heat and cold.

This is the highest point on the line; it has an altitude of 1175 mètres.

206 kil. *Tafaroua*; altitude 1150 mètres. The culminating point of the Haut Plateaux has now been passed, and the level gradually descends. The road by the caravanserai of El-Mai to Géryville branches off S.E. To the W. is *Timellas*, and 5 kil. beyond it the extensive ruins of *Mtalsa*, Θ ; they

cover an area of about 12 acres, and must have contained a population of not less than 10,000 persons, probably Berbers, during the Roman occupation. The position was no doubt chosen on account of the Oued Timetlas, which afforded it an abundant water-supply. The line has now for some kilometres passed through a perfectly sterile country, absolutely no vegetation during any season.

215 kil. *Kralfallah*; altitude 1109 mètres. The line continues through sterile country on to

236 kil. *Modzbah-Sfid*. A short branch line to *Markoum* turns to the W. The main line continues to

271 kil. *El-Kreider*, more correctly *El-Khadthera*, the Green; altitude 988 mètres. This station is on the borders of the *Chott el Chergui*, the passage of which has been facilitated by a small island.

Shortly before reaching this place the Marabout and village of Sidi Khalifa is passed. The few inhabitants of this small oasis claim descent from the Prophet, and the privilege of passing everywhere without paying tribute of any kind. Kreider is a very important strategical position, as it commands the passage of the Chotts. There is an abundant supply of water, such as it is.

It was here that Colonel Mallaret, during the troubles of 1881, allowed Bou Ammama to pass in open daylight with all his plunder and prisoners, many of the latter being European women. He had been warned of the rebel's proximity the day before, and had a much superior force.

The railway, after passing the Chott, continues through a perfectly barren country till it arrives at

352 kil. *Mecheria*, alt. 1158 mètres. The strategical importance of Mecheria is very great, but it has no interest for the traveller. The extremes of heat and cold make it most trying for the European constitution.

385 kil. *Nadma*.

420 kil. *Mekalis*.

459 kil. *Atn-Sefra*. This is the present terminus of the line, but it is being continued as far as *Djenan-Bou-*

Rezq, a distance of 60 kilomètres farther S. The law sanctioning it was passed on the 25th January 1892. In the debate in the Chambers it was stated: "The Government does not consider it as the first step in advance in the Sahara . . . but an independent railway, limited and defensive."

This line will facilitate excursions to three interesting places—the oasis of *Tiout*, of the ordinary Saharan type, and those of *Moghrar Foukani* (the upper), and *Moghrar Tahtani* (the lower). These are totally unlike any others in North Africa; they are well-watered valleys with fine scenery, and almost European vegetation. Peaches, apricots, and all the fruits of the north flourish in great perfection.

[From *Kralfallah* a road branches off in a S.E. direction, crossing the *Chott el Chergui* farther to the E., passing *Atn-Sefsifa*, and reaching the military station of *Géryville*. A fort encloses the barracks for the garrison, and other military buildings. Outside the fortification is the residence of the Arab chief, and a few other houses which are occupied by the colonists. The place was founded in 1852, on the site of a small Arab town, *El-Biod*, so called from the stream before mentioned.

To the S.W. of *Géryville*, between that station and the frontier of Morocco, is an extensive tract of country more than 193 kil. in length, consisting of low sandy hills and plains, which, from October to April, affords good and plenteous pasture for the numerous flocks of sheep and camels belonging to the nomad tribes. In the month of May they migrate northwards to their respective territories, where their absence has permitted a new crop to spring up ready for use. Water in the autumn, winter, and spring, is abundant in what are called *ghadirs*, or small lakes, where the rain-water collects and remains till dried up by the summer heat. The word *ghadir* is derived from the Arabic root *ghadara*, to leave or betray, because the water is left by the rain, and frequently betrays those who count too surely on

finding it. In this tract occasional springs of pure fresh water have formed green and fertile oases, which appear like islands in the midst of the desert. These are the oases of the *Oulad Sidi Cheikh*.

Some of them are of considerable size, containing many houses, and even occasionally mosques, and have inhabitants to the number of from 500 to 1200. They are each governed by a Cheikh or chief, and a council composed of the principal leaders of the tribe.

25 kil. E. of Géryville is *Arounet-bou-Bekr*, where Colonel Beauprêtre and the whole of his force were destroyed in 1864. At the first news of the defection of the *Oulad Sidi Cheikh* the garrison of Géryville was reinforced, and Colonel Beauprêtre, Commandant-Supérieur of Tialet, was sent to observe Djebel Amour. Too confident in the fidelity of his *goum*, he allowed himself to be drawn into a position where he was assailed by a large body of insurgents, and both he and every member of his detachment were killed. The enemy, however, sustained great losses, and Si Seliman, the leader of the insurrection, fell.]

ROUTE 28.

From Oran to Beni Saf, Nemours, and the Frontier of Morocco.

From Oran to Aïn-Temouchent by rail (see Rte. 24).

Thence there is a road to Beni Saf, passing near the prosperous village of *Les Trois Marabouts* (5 kil. from Aïn-Temouchent).

It derives its name from an Arab cemetery in which are three conspicuous domed tombs, the largest of which is that of Sidi Rabah Oulad Khalifa. The village was founded in 1880 for ninety families, and to each a grant of 30 hectares of unusually fertile land was given. Among them are a considerable number of Protestants from the upper Alps, sent over by the Protestant committee of Lyons, by

means of funds collected from friends of the Vaudois in France and England.

15 kil. *Guiarel*, formerly *Ain-Tolba*, a village peopled in 1891, principally by Vaudois. The land around is well cultivated, and much of it planted with vines.

25 kil. We enter the small valley of El-Ensor, called "the garden of Beni Saf." It contains several good springs of water, part of which are used for the supply of Beni Saf, and part for the irrigation of market gardens. There are also several establishments for the manufacture of *crin végétal*.

32 kil. **Beni Saf**. Pop. 2472.

The iron ore of the district has given rise to a most important industry, and has caused the construction of a new harbour in a part of the coast where it was greatly needed.

The company to which the great iron mines of Mokta el-Hadid, near Bône, belong, acquired the rich mineral basin of Beni Saf, 6 or 7 kil. E. of the mouth of the Tafna and of the island of Rachgoun. They also obtained by purchase a large tract of country round about, containing nearly 2500 hectares, so as to prevent competition, or the establishment of colonists not under their own control.

Here, under the direction of their own engineers, and without State aid, the company have constructed a commodious port of 18 hectares in extent, by means of two artificial moles or breakwaters. The W. mole, after running in a northerly direction for 500 mètres, turns abruptly to the E.N.E. and is thus prolonged for about 600 mètres, protecting the harbour from all winds from W. to N.E. The mole which shelters the harbour from the E. is 300 mètres long. The entrance faces that direction; it has a width of 150 mètres, and is completely sheltered from E. winds by the coast.

There is only one loading berth, and the ore is brought to it direct from the mines in trucks. The minimum depth of water is 7 mètres.

The amount of hematite iron ore at the Beni Saf mines is immense; it

is worked in open quarries close to the sea, and tilted into the vessel's hold ; from 1600 to 2500 tons a day can be put on board. It contains from 58 to 62 per cent of iron and 2 per cent of manganese.

A new town has sprung up here ; it consists entirely of those connected with the mines, for the most part Spaniards and natives of Morocco. Everything belongs to the company ; the land around is excellent for cultivation and colonisation, but nothing can be done without their sanction. The banks of the Tafna are easily susceptible of irrigation, and a railway from Tlemçen may one day terminate here or in the vicinity.

The harbour is an open one, and is to revert to the State at the option of the Government in 1895, so it is probable that there is a considerable future for the country at no remote period. Private vessels are not excluded if they can find any freight, such as alfa, corn, etc., but they have to pay dues of 2 f. per ton to the company ; they can only use the E. mole.

In 1893, 203,338 tons of ore were exported, chiefly in British vessels, to Great Britain, the United States, France, Holland, and Belgium.

There are workshops at Beni Saf available for repairs of every kind to vessels.

The island of Rachgoun lies about 1800 metres from the coast ; it is of great value to the port by breaking the force of the sea, all bad weather coming from the W. or N. W.

[There is a good carriage road to Tlemçen, distance 65 kil., and a diligence runs every day. It ascends the valley of the Tafna, an important river, having a course of 80 kil. through a rich country, admirably suited for colonisation. The plain is feverish, it is true, but healthy sites for farms and villages could be found on the heights on either bank.

After leaving this valley the road passes *Remchi*, now called *Montagnac*, after the hero of Sidi Brahim, a village founded in 1381, the residence of the

administrator of the district, situated in the country of the ZENATA, the aboriginal Berber possessors of Tlemçen ; *Ain-Fekrina* or *Les Trois Marabouts*, marked by a palm tree, near which, on a mamelon, is a tepid spring, which forms a small basin of sweet water, a part of which is used for the supply of Tlemçen, and lastly, *Hennaya*, a village surrounded by richly cultivated land and olive groves.]

Proceeding along the coast from Beni Saf towards the W. we reach the mouth of the Tafna. On a hill above its right bank are the remains of the fortified camp built by the French during the expedition which led to the subjugation of this part of the country (see pp. 57, 58). 6 kil. higher up, on its left bank, are the ruins of *Takenbrit*, Θ , supposed to be the ancient *Siga*, the first capital of Syphax, before he transferred the seat of his government to Cirta (Constantine). A milliary column was found in the river here, bearing the word *Siga*, and stating the fact that it was erected at 1 mile from that place, probably on the road to *Oppidum Timici*. Very little now remains of Roman construction ; an Arab city succeeded to it in the 10th century, which was in its turn abandoned after its destruction during the war between El-Ghania and the Almoahides in the 12th century.

Still farther along, and about half-way between Beni Saf and Nemours is *Honaï* or *Mersa Honaï*, situated on a small bay formed by Cape *Noe* or *Noun*. It may be visited either from Beni Saf or Nemours. It is about 5 hours' distant from the former place by land and $2\frac{1}{2}$ by boat. From the latter town there is a strategic road made by the engineers in 1845-47 for the purpose of reducing the *Trara* district. The distance is 40 kil. There is no accommodation there of any kind.

Hosn-Honaï is mentioned by El-Bekri as an important city, the birth-place of Abel-el-Moumen, first sovereign of the Almoahides who reigned at

Tlemçen from 1145 to 1248. He was a student in a Zaouia here, and after his accession to power he founded a city on the site of his birth, about 1163, and made it the port of Tlemçen. Leo Africanus also describes it as a small but ancient city, surrounded by strong and high walls, frequented by Venetian galleys, which did a good trade with Tlemçen. The houses were fine and well kept up, with trellises of vine in their courts, and decorated with rich mosaics.

On the occupation of Oran by the Spaniards in 1509 it was deserted by its inhabitants, who fled to Tlemçen or Morocco, and it has never been occupied since.

The concrete walls, strengthened at short intervals with square towers, are still standing, and enclose an area of about 7 hectares; they are 6 or 7 mètres in height, and 5 in thickness; some of the interior chambers are more or less entire. In the W. corner of the *enceinte* is the citadel, on more elevated ground. On the hill to the E. is a watch-tower and the Marabout of Sidi Brahim.

The walls are breached in many places, the crowning parts have everywhere disappeared, and but few traces of architecture remain. Fragments of two of the city gates, however, still exist, and show that they were at one time enriched with elegant Moorish tracery and tile mosaics.

The interior of the ruins is a charming tangle of fig trees and oleanders; when the writer visited it (May 1886) the figs were nearly ripe, the oleanders were in full bloom, the air was fragrant with wild thyme, and there was deep shade everywhere; while running water nearly surrounded the city walls.

The Arabs were accustomed to construct defensive works of concrete; here, if they had not known it, Nature would have taught them the art. The hills round the bay are composed of conglomerate of indurated sand and water-worn pebbles, so that the materials for their work lay ready to hand; they had only to break up the soft conglomerate and rebuild it in the shape of city walls.

Until very recently there existed within the walls a tower 19 mètres high, with a spiral staircase ascending exteriorly to the top; this was evidently the central portion of a minaret of which the exterior walls had disappeared. The lower portion had been so much worn away that the superincumbent mass appeared to rest on the merest point; thus it had stood since before the memory of man, but it was eventually blown down during a heavy storm in the beginning of 1884.

Three hours by steam from Beni Saf is

Nemours. Pop. 2828.

This is the last French town on the coast, and is distant 36 kil. from the frontier of Morocco. It was called *Jamâa el-Ghazouat* or rendezvous of the Pirates, under the Turkish government, and the ruins of the Arab town are still visible on the hill which forms the E. side of the bay. The opposite hill is crowned by a lighthouse. The bay included between these two points is sheltered from all winds except from N. E. to N. W., but as this is the prevailing quarter from which bad weather comes, it is most insecure, and communication with the shore is only possible during very fine weather. There are two curious upright rocks in the bay, known as "Les deux Frères" (*ad fratrem* of the itinerary of Antonine), which are picturesque in appearance, and might be made useful as the limit of a breakwater should a harbour ever be constructed here.

The country on both sides of the frontier of Morocco is rich in mineral wealth: the most important mines which have hitherto been worked are those of argentiferous lead at *Ghar Rouban*, about 80 kil. to the south. The proximity of vast forests permitted the ore to be reduced on the spot, and the pig-lead was sent to Nemours for exportation. But the premises and machinery were destroyed by the Arabs during the insurrection of 1871; the company which owned them failed, and the place is now deserted.

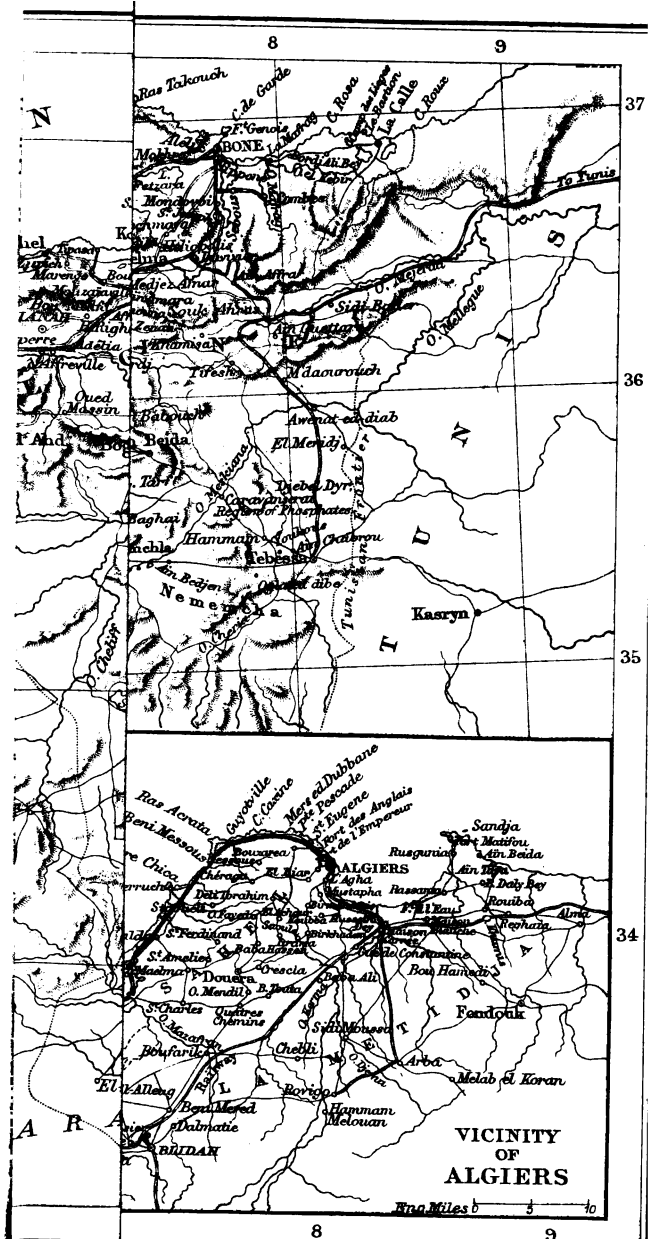
There are other mines of iron, lead, and calamine, but none are being worked to any great extent. A considerable trade is being done in alfa and *crin végétal*, and in cereals when the harvest is abundant.

Nemours is a military station, and one of the most healthy spots on the coast. The Transatlantic steamer calls here on its way to and from Gibraltar.

The frontier of Algeria is not considered satisfactory by the French authorities, and its "rectification" is a contingency never absent from the official mind. No doubt a great opportunity was lost when Algeria became French. The river Molouia, the ancient *Malua* or *Molocath*, had always been the natural boundary between *Mauretania Cesariensis* and *Tingitana*, the present empire of Morocco. It is difficult to understand why the commission of 1845 accepted in place of it the Oued Kiss, separated from it

only by the sandy beach of Tazagaret, hardly 12 kil. in length; and how they permitted the Zaffarine Islands, which lie off the coast, and which were unoccupied at the period of the conquest, to fall into the hands of the Spaniards.

It is said that the expedition sent from Malaga for this purpose arrived only a few hours before a French one from Oran, and that the latter was not a little surprised to find the flag of Spain already flying there. A strong disposition has been shown of late to rectify this frontier by following the courses of the Molouia and the Oued Gheir, until the junction of the latter with the *Oued Msaoura* at *Igli*, and to follow the course of this river to the 29° parallel of latitude, so as to include *Timimoun* within French territory, as also *Oudjda*, *Igli*, *Figwig*, *Beni Abbès*, *Kezzas*, the territory of the *Beni Snassen*, and many other tribes now subject to Morocco.



VICINITY
OF
ALGIERS

Scale: 0 5 10
Miles

CITY OF TUNIS.

Tunis was certainly known to the ancients by its present name, even before the foundation of Utica and Carthage; it was probably founded by native Africans, and not, like those cities, by Phœnician colonists. Mohammedan authors say that it was at one time called *Tarshish*; it was also called *El-Hathera*, the Green, on account of the beauty of its gardens.

It was originally surrounded by a wall, but a great part of this has now disappeared. The Marine Gate is quite isolated, and the walls on each side only exist in the name of the street, *Rue des Ramparts*.

The other gates are the *Bab el-Hathera*, *Bab Abd-es-Salem*, and *Bab es-Sajen*, towards the Bardo Palace and the Manouba; the *Bab Sidi Abdulla* under the Citadel; the *Bab Sidi Alewa* on the road to Zaghouan; and the *Bab es-Souika* on that leading to Susa and the coast. In addition to the *enceinte* there are three forts built in the time of Charles V., called respectively *Borj Manoubia*, *Borj Filfila*, and *Borj er-Rebta*. The last of these is a fine specimen of mediæval military architecture.

Tunis is commanded by two hills in its immediate vicinity, namely, *Sidi bel Hassan* to the S., and the *Belvédère* to the N. The fortress which crowns the former belongs to a time far anterior to the *Borj er-Rebta*, and its position is unrivalled.

The *Belvédère* was the first position occupied by the French troops, and the remains of their entrenched camp on the summit are still visible.

Nothing is more attractive to the stranger than the **Native Bazaars**, which, amidst all the manifold changes and ameliorations which have taken place around them, still retain their original character. They are narrow and tortuous, well shaded by the houses themselves, and frequently covered with planks or matting. The trades generally keep together, so that the purchaser has the advantage of comparing the various articles of the same sort in one place. The principal

are the *Souk el-Attarin*, or market of the perfumers; *Souk el-Farashin*, where carpets and all manner of gaily coloured garments are exposed for sale; *Souk el-Serajin*, or bazaar of the saddlers, full of splendid embroidery on leather; *Souk et-Turk*, where arms are sold; *Souk el-Bey*, *Souk el-Belad*, and numberless others.

The *Resident Général* has expressed his determination to preserve this part of the town intact, and a new city has been created between the marine gate and the lake. A wide boulevard, the *Avenue de France*, bordered by stately houses, including the French Residency, the principal hotel, the Roman Catholic Cathedral, banks, public offices, the inevitable cafés, etc., has been constructed, and wide streets branch off from it in various directions. On the N. side of the European quarter is an extensive Maltese quarter, called *Malta es-Segheira*, or Little Malta, inhabited principally by the quiet and industrious natives of that island.

The perimeter is about 8 kil., but the area is not all inhabited. A great deal of space is occupied by cemeteries, ruined houses, and ground not built over.

The population of the Regency is stated to be about 1,132,000, composed as follows:—

French . . .	15,000
Italians . . .	20,000
Maltese . . .	10,000
Other Europeans . . .	8,000
Jews	60,000
Mohammedans . . .	1,019,000

Total . 1,132,000

The city of Tunis is supposed to contain 20,000 Europeans, 30,000 Jews, and 130,000 Mohammedans.

The costume of the Jews in Tunis differs greatly from that which used to be adopted by them in Algiers before they became "French citizens," or from what actually prevails in Constantine and other less Europeanised parts of Algeria. It is always very trying for the fair sex to appear in

skin-tight trousers and short jackets, but the ungracefulness of this is exaggerated by the remarkable corpulence which distinguishes the Jewish ladies in Tunis, and which is supposed to constitute one of their most attractive features.

The Maltese are here a numerous and most valuable class of the community. They work hard, live abstemiously, and frequently succeed in collecting a fair competence with which to retire to their native isle.

The lower part of the city and the faubourgs nearest to it are occupied by Christians and Jews; the upper part is reserved for the Mohammedan population, and is built in the form of an amphitheatre crowned by the Kasba. In front of it is a square, called *Souk el-Islam*, containing the Dar-el-Bey and two handsome rows of shops built in a pseudo-Moorish style, with an astronomical clock in the middle, showing the hour, the day of the month, and the moon's age. Enclosed within these four sides is a small garden.

The interior of Tunis presents a confused network of streets and lanes, one or two of which, wider than the others, run nearly through its whole length.

English Church.—The English church of St. Augustine is only a few minutes' walk from the Hôtel de Paris; a site was granted by the Bey, and a neat little iron building, lined with wood, was erected by subscription. The E. window was put in by the English community in memory of John Howard Payne. It is intended to build a permanent church in the disused English cemetery.

Roman Catholic Churches.—The Roman Catholic Church in N. Africa was governed by one of its most distinguished prelates, Cardinal Laviege. He was for many years Archbishop of Algiers, but in the beginning of 1885 the Pope re-established the archi-episcopal see of Carthage, and the *pallium* of the new dignity was conferred with much solemnity

upon him at Algiers. He was also created Primate of all Africa. He has been succeeded in the archbishopric of Carthage and in the primacy of Africa by Monseigneur Combes.

The *Provisional Cathedral* is situated in the Avenue de France, opposite the French Residency. There is a large church in the *Capuchin Convent*, R. Sidi Mourgana; this was originally founded by the Order for the Redemption of Captives in 1624, but the church at least has been entirely rebuilt since. In the establishment of the *Frères de la doctrine Chrétienne*, R. Toweela, is a very ancient chapel, the first one used by free Christians in the city, and till very lately the parish church.

Religious Communities.—There are already many religious communities established in the Regency. The *Dames de Sion* have at Tunis a very superior establishment for the education of girls and boys under seven years. The sisters of *St. Joseph* have nine establishments; two at Tunis, and others at the Goletta, Bizerta, Susa, Monastir, Mahadia, Sfax, and Djerba. The sisters of the *Mission d'Afrique* have houses at Beja and the Marsa. The brothers of the *Doctrine Chrétienne* have three schools at Tunis and one at the Goletta. There is also a large asylum for aged people kept by the *Petites Sœurs des Pauvres*, just outside the town, beyond the barracks and the Normal School.

There is also a *Greek Church*, which for two centuries was under British protection.

English Cemetery.—The Protestant cemetery of St. George, belonging to England, but used by other Protestant nations, was formerly situated beyond the inner walls of the town; these have been removed, as the city has greatly extended in that direction, and it is now surrounded by houses in the quarter called *Malta es-Segheira*. The keys can be obtained at the British Consulate. It contains the graves of several English Consuls-

General—Mr. Campion, 1661; Richard Lawrence, 1750; James Trail, 1777; Sir Thomas Reade, 1849. The oldest grave is that of Samuel Webbe, a merchant, who died 6th October 1648. The most interesting was that of John Howard Payne, Consul for the United States of America, who died at Tunis on the 1st April 1852. A monument was erected to him by "his grateful country," and it recorded the fact that "His fame as a poet and dramatist is well known wherever the English language is spoken, through his celebrated ballad of 'Home, Sweet Home,' and his popular tragedy of *Brutus*, and other similar productions."

On the 5th January 1883 the body was disinterred and carried to the United States; it was consigned to its final resting-place in Oakhill Cemetery, George Town, Washington, with much solemnity, on the 9th June 1883. A monument has been erected at Tunis on the spot where the grave was, similar to that over the new grave in America, the expense of the whole proceeding having been defrayed by Mr. Corcoran of Washington.

As all intramural interments are now prohibited, this cemetery is closed, and a new Protestant cemetery, granted by the municipality, has been opened outside the town, next to the R. C. one.

Roman Catholic Cemeteries.—There are two,—the old one, attached to the cathedral, and a new and larger one outside the Bab el-Hathera. The former is now closed; in it is an ancient chapel, supposed to have been that of the Christian slaves. On the altar was a consecration stone bearing the date 1659; this has been removed to St. Louis. Underneath are vaults where an immense number of coffins were found, amongst them was that of the father of the late M. Ferdinand de Lesseps, who died here as Consul-General of France in 1832; this also has been removed to St. Louis.

This chapel is perhaps the one mentioned by Père Dan (1635), who says: "At Tunis there are various chapels in the Bagnos, but especially there is a very fine and large one, that of St. Antoine, a little outside the town,

where all the Christian slaves and free men may go without hindrance to hear mass. The French Consul has generally a priest and a chaplain. There is no place in Barbary where the priests and those connected with the church are more free, and where the Christian religion is more tolerated than Tunis."

Public Instruction.—In 1876 Mohammed es-Sadik Bey, during the ministry of Kheir-ed-din Pasha, created a college called *Medressa Sadikia*, in order to educate youth for administrative functions. A great part of the confiscated property of the former minister, Si Mustapha Khasnadar, was appropriated for this purpose. On the fall of Kheir-ed-din the college fell into a condition of complete neglect, and it was only after the French occupation that it was completely reorganised, and placed under the control of the department of public instruction, of which M. Machuel is director. The instruction consists of courses of the Arabic language and literature, French and Italian, mathematics, physics, history and geography. It receives 150 native students gratuitously, who are provided with their morning meal; 50 of these reside entirely within its walls, and are clothed and provided with every necessary.

College of St. Charles.—This is one of the most useful of the many works inaugurated by the Cardinal Lavigerie; it is now, however, transferred to the town of Tunis. In 1875 the "white fathers," *Pères Missionnaires d'Afrique*, were brought by his Eminence from Algiers to Carthage as guardians of the Chapel of St. Louis. There the first school was opened, but it was subsequently converted into a seminaire, and the college was transferred to its present site near the cathedral, and named *St. Charles*, after the saint whose name the Cardinal bore. About 240 youths of all nations are educated there; French, Italian, Maltese, Jews, and Mohammedans live together in perfect harmony, and prepare the way for what the French ever regard as a future possibility, complete assimilation.

The Normal School, or Collège Alaoui,

was founded in 1884 by the present Bey, with the consent of the French Government, for the purpose of educating a class of teachers capable of spreading the French language and influence in the interior of the Regency. The buildings were originally commenced by the Khasnadar for a medressa; they are situated in one of the highest and most healthy parts of the city, commanding a splendid view in every direction.

Mosques.—Throughout the Regency of Tunis, except, strange to say, in the sacred city of Kerouan, Christians are rigorously excluded from entering any of the mosques. The principal one in Tunis is the

Jamâa ez-Zeitouna, "Mosque of the olive tree," a sort of university, where a vast number of youths receive a religious education. It was founded by Hassan el-Ghessani el-Oujdi in A.D. 698, under the reign of the Khalifa Abd-el-Malek bin Merouan, on the site, it is said, of the cell of a Christian anchorite. It is in the very heart of the city, surrounded on every side by bazaars, so that a view at least may be had of the central court from various directions.

Jamâa el-Kasba, the "Mosque of the Kasba," built about 1232. It was formerly entered from that citadel, now it has been walled off from it to prevent intrusion on the part of the soldiers.

Jamâa Sidi Mahrez, in the quarter of the Bab es-Souika, distinguished by its large dome surrounded by smaller cupolas. This building enjoys the privilege of sanctuary. There are innumerable other mosques, medressas or colleges, zaouias, and tombs of Mohammedan saints. The mausoleum of the Beys, called *Turbet el-Bey*, is situated near the Souk el-Belad; it is distinguished by its green-tiled domes; the exterior is decorated by plinth, pilasters, and entablature of rose-coloured marble, sculptured in the Italian style.

Native Troops.—The Tunisian army has been reduced to a single battalion

of honour for the Bey, but the soldiers are well drilled and equipped, and are no longer to be seen bare-footed and knitting stockings when on guard.

The *KASBA*, which forms one side of the square in which the Dar el-Bey is situated, at one time contained the ancient palace of the Bey, and immense barracks for the accommodation of Janissaries, as well as bagnios for Christian slaves. It was here that these rose on their keepers when Charles V. was attacking Tunis, and greatly contributed to his success (see p. 37). The Spaniards strengthened it during their occupation, and built the aqueduct behind the Bardo to supply it with water.

Now all the old buildings have been demolished, and handsome and commodious barracks constructed for the use of the French troops; nothing but the exterior wall of the ancient Kasba remains.

The *Dar el-Bey*, or town palace, is well worthy of a visit; the lower rooms are occupied as public offices, and are quite uninteresting, but the traveller can easily obtain permission to view the private apartments of the Bey. His Highness holds receptions here every Saturday, driving over from his residence at the Marsa for the purpose. Some of the older rooms, built by Hamouda Pasha about a century ago, are perfect gems of Moorish decoration, equal to anything in the Alhambra. The principal are the *outer court*, on each side of which is a bedroom for an officer in waiting, called *Beit Dhabit el-Asâa*. The *Beit Wuzir el-Kebr*, or chief minister's apartment, splendidly decorated with tiles and *Nuksh hadida* work, and with a richly painted and gilt ceiling. The *Beit el-Bey*, or audience chamber, leading to his private bedroom. The *Beit el-Fetoor*, or dining-room, with walls of coloured marble and red granite from Carthage, and a roof blazing with gold and colours; and lastly, the *Beit el-Hookem*, or Hall of Judgment, with a domed roof of the most delicate plaster arabesque work.

A long passage, poor in comparison

with the more ancient part of the building, but comparatively inoffensive, leads to an immense suite of state rooms, painted in the style of a French café; the walls hung with red damask; gilt chairs and Louis XVI. consoles ranged around; everything that is rich and expensive of its kind, but an outrage on the incomparable beauty of the older rooms.

The delicate and intricate arabesque plaster work called *Nuksh hadida*, for which Tunis was once so celebrated, is now almost an extinct art, and is being replaced by European decoration, such as would appear tawdry on a cheap tea-tray.

In this palace Queen Caroline resided during her stay in Tunis, in 1816; as did at a subsequent period the brother of the Emperor William I. of Germany and his daughter, and later still three of our own royal princes were welcomed here by the Bey.

Walks round Tunis.

From the square of the Kasba a very pleasant walk is to the Bab Sidi Abdulla esh-Sherif, near which the water from Zaghouan enters the town through a handsome fountain. Here a cistern has been constructed capable of containing 15,000 cubic metres of water. Outside the gate there is a fine panoramic view of the hills on the east side of the harbour, Zaghouan with its ruined aqueduct on the horizon; the Bardo, two picturesque Spanish forts; and lastly, coming round again to the point of departure, the site of Carthage and the town of Tunis, in which the most conspicuous object is the many-domed mosque of *Jamäa Sidi Mahrez*.

The traveller may continue his walk between the old forts; all around them are *Silos*, or *Rabtas*, as they are here called; underground magazines of a bottle-like shape for storing grain, from which the castle obtains its name of *Borj er-Rabta*. Thence he can join the Bardo road, pass *Bab es-Sajan*, from which there is a good view of the Spanish aqueduct on the left, also *Bab es-Selam*, and so home to his hotel through the European quarter.

Another beautiful view of the town is from the hill called by the Europeans Belvédère, to the northward of the city. The panorama of the city sloping upwards towards the Kasba, and of the lake and surrounding country, is very fine.

A finer view still is from *Borj Ali Rais*, on the S.E. of the town, on an elevated hill opposite that on which the tomb of *Sidi Bel Hassan* is situated. Leave Tunis by the *Bab Alewa*, and pass through the cemetery just outside of it. A carriage can drive nearly to the top. The fort is occupied by a small detachment of artillery, and the traveller can easily obtain permission to mount and see the view from the terrace.

EXCURSIONS IN THE NEIGHBOURHOOD OF TUNIS.

TO CARTHAGE AND THE MARSA.

Naturally the first excursion that the traveller will desire to make is to the site of the mighty Carthage—"dives opum, studiisque asperrima belli." He may go by train, the station of Carthage being within half an hour's walk of the chapel of St. Louis; but the preferable course is to hire a carriage and return by the Marsa; the whole may be done in five or six hours.

Carthage.—Carthage is said to have been founded by a Phœnician colony from Tyre, about B.C. 852. They gave to it the name of *Kart-Hadaet*, the new city, in opposition to *Utica*, the old. This name became in Greek *Carchedon*, and in Latin *Carthago*.

For the mythological account of its foundation and its ancient history, see Historical Notice, p. 22.¹

It continued in uninterrupted prosperity and glory for upwards of 700 years, till its destruction by P. C. Scipio, B.C. 146. Thirty years later it was colonised by C. Gracchus, raised to a considerable condition of prosperity by M. Antoninus and P. Dolabella,

¹ Consult also the valuable work of R. Bosworth Smith, *Carthage and the Carthaginians*. London: Longmans, Green, and Co., 1887.

and rebuilt with much magnificence by Augustus. It subsequently became the chief seat of Christianity in Africa, and many of its most splendid buildings were destroyed with the view of rooting out the last traces of paganism. Its utter destruction, however, did not commence before the Arab invasion in 697, since when one generation after another has continued the operation with unremitting zeal; even as late as the time of St. Louis it still existed as a city; and the narrative of the early Arab historians, such as El-Bekri and El-Edrisi, prove that certain important buildings were still existent and almost intact. But now nothing remains of the great city save a few cisterns and some shapeless masses of masonry; all that is valuable has been carried off either for the construction of the modern city of Tunis or to enrich the public buildings and museums of Europe; and now, indeed, there can be no doubt that in very truth

“Deleta est Carthago.”

The situation of the city was singularly well chosen, on the shores of a magnificent and well-sheltered bay, forming the southern part of an immense gulf, and sheltered from the N.W. and W. by a projecting cape. Carthage consisted, properly speaking, of three different towns, all enclosed within the same wall—namely, *Byrsa*, the citadel; *Cothon*, which included the port and that part of the town occupied by the merchants; and thirdly, *Magaria*. The first occupied the site of the present chapel of St. Louis, the second the low land between it and the Goletta, and the third stretched in rear of both, from the banks of the lake to the sea-shore, below the village of Sidi Bou-Said.

Chapel of St. Louis.—On the 8th of August 1830 a treaty was concluded between Charles X. and the Regency of Tunis, containing the following article:—

“We cede in perpetuity to H. M. the King of France a site in the Málaka to erect a religious monument in honour of Louis IX. on the spot where that Prince died; we engage to respect and

to cause to be respected this monument, consecrated by the Emperor of France to the memory of one of his most illustrious ancestors.”

It is difficult to determine the exact spot where St. Louis died on the 25th of August 1270, but the spot selected as the site of the chapel was the *Byrsa* itself, to which place, according to Joinville, St. Louis retreated after his defeat before Tunis, the better to be able to superintend the embarkation of his troops and watch the movements of the enemy. Perhaps the natural desire to occupy so commanding a position was not altogether absent from the mind of the astute French Consul who was empowered to make the selection.

Regarding the style and architecture of the chapel the less said the better. Above the entrance is the following inscription:—

LOUIS PHILIPPE, PREMIER ROI DES FRANÇAIS, A ÉRIGÉ CE MONUMENT EN L'AN 1841, SUR LA PLACE OÙ EXPIRA LE SAINT LOUIS, SON AÏEUL.

Within the chapel has been interred the remains of the Consul-General who negotiated the treaty, father of the celebrated Count Ferdinand de Lesseps; they, together with the original tombstone which once covered them, having been translated from the old chapel near the Cathedral at Tunis.

Close to St. Louis may be seen a neat little chapel, built principally for the use of Maltese pilgrims, and out of compliment to them called by the Maltese name of Notre Dame de la *Meliha*. It contains three stained glass windows in honour of Saints Augustine, Cyprian, and Monica, and two paintings to imitate windows dedicated to Saints Perpetua and Felicitas. Attached to it is a Carmelite convent, a branch of that at Algiers, founded in April 1885, and in immediate proximity to both the Mohammedan Marabout of Sidi Saleh.

It was one of Cardinal Lavigerie's most cherished projects to restore the great city, once the Queen of Africa and the rival of Rome itself, but the rise of Carthage would mean the fall of Tunis; it is difficult to divert com-

merce from its ancient channel, and hard to devote so important a city to decay.

He, however, built a large cathedral here, but it can hardly be considered as an architectural success, though of imposing proportions. Round the walls is an inscription taken from the writings of Leo IX., to the effect that beyond all doubt, after the Roman pontiff, the Archbishop of Carthage and Primate of Africa is the most important personage in the church, and below are the marble tablets which used to be in the *Salle de St. Louis*, containing the arms of descendants of French Crusaders. In a vault below the altar is the tomb of the cardinal, consecrated by himself. He died at Algiers 26th November 1892, and his body, after a solemn state funeral there, was conveyed to Carthage in a French man-of-war. The inscription on the sarcophagus is: *Hic in spem infinitæ misericordiæ requiescit Karolus - Martialis Allemann - Lavigerie olim S.R.E. Presbyter cardinalis archiepiscopus Carthaginienensis et Algeriensis, Africæ Primus, nunc civis. Orate pro eo. Natus est Bayonæ die trigesima prima Octobris 1825. Defunctus est vigesima sexta Novembris 1892.*

The solemn consecration of the cathedral by the cardinal took place on the 15th May 1890. It was attended by a great number of prelates and clergy from Italy, France, and Africa, and by all the authorities and consuls at Tunis. The heart of St. Louis, formerly preserved in the cathedral of Monreale in Palermo, was placed in the new basilica enclosed in a case, 2 mètres high, the work of Armand Caillat, a silversmith at Lyons, which had obtained the *grand prix* at the Paris Exhibition.

Behind the chapel is a college for priests, the *Séminaire*, not only of the "white fathers," who wear the Arab burnous and are destined for missionary labour, but for the ordinary priesthood of the diocese. The novices of the former order reside at the *Maison Carrée*, near Algiers.

In the lower story of this building is the *Salle de St. Louis*, on the walls of

which are paintings representing scenes in the Saint's passage and death at Tunis. The Pope's Legate throughout the series is the portrait of Cardinal Lavigerie.

Within the enclosure of St. Louis is a most interesting **Museum** formed by the indefatigable explorer and learned archæologist, the Rev. Père Delattre, one of the white fathers and chaplain of St. Louis, who has been occupied in exploring the site of Carthage for many years. It is open to the public on Sunday, Monday, Thursday, and Saturday, from 2.30 to 6 P.M., excepting during the hours of divine service, which are usually between 2.30 and 3.30 P.M. Permission to see it can, however, always be obtained by a passing stranger on written application to the director. There is no difficulty in communicating with him, as there is a post and telegraph office within the walls of St. Louis.

An immense number of fragments of sculptured stones, statues, Punic and Latin inscriptions, etc., have been built into the walls around. Of the 500 Punic inscriptions, nearly all are votive tablets, a few only being funereal; they bear many different symbols, such as the upright hand, the disc of Bâal, the crescent of Astarte, palm trees, rams, etc., and inscriptions which vary very little from the following formula:—*To the great lady, Tanith Fen Bâal, and to the Lord Bâal Hammon, vow made by . . . , son of . . . , son of . . . , that their prayers may be heard.*

Bâal was the malignant deity, rejoicing in human sacrifices, and Astarte the Carthaginian Venus, identical with "the abomination of the Sidonians."

The Christian inscriptions generally contain little more than the name of the deceased, generally with the expressions *In pace*; *Fidelis in pace*; *Innocens in pace*, etc.

The most important objects in the collection are contained in a large hall. The Punic period is here represented by terra-cotta vases, lamps of the most primitive forms, iron and bronze implements, and some really interesting and valuable inscriptions. The rest of the

collection consists of objects of the Roman period, pagan as well as Christian. Amongst the most curious is a cippus containing bas-reliefs of the principal occupations of a Roman lady's day—toilet, work, and reading. There is a large collection of lamps, some containing subjects from heathen mythology, others from the Old Testament, such as the colossal bunch of grapes, Daniel in the lions' den, and the seven-branched candlesticks; while many are distinctly Christian, and contain crosses of many shapes, and the Saviour in various characters.

One very interesting terra-cotta toy represents a man playing an organ, which is worked by hydraulic power.

A glass case contains Carthaginian medals, enabling us to follow the fortunes of that city from its foundation to the Arab invasion, and even to the crusade of St. Louis in 1270, and the expedition of Charles V. in 1335.¹

There are many tombstones from the Cemetery of Slaves of the 1st and 2nd centuries; these throw quite a new light on the employment of the slaves and freedmen of the imperial house, and of the constitution of the *tabularium* of Carthage, and of the principal attributions of public functionaries. There are touching epitaphs, such as that which *Ostaria Procula* caused to be engraved for her husband *Aelius*, who lived seventy-six years, and of whom she had no complaint to make, *De quo nihil quæstæ est*. Finally, there are important Christian inscriptions obtained from the basilica, recording the names of bishops, priests, deacons, and readers, which, were they not so seriously mutilated, would have been of the greatest service towards clearing up the history of the early African church.

The *Byrsa* was the first point fortified by the Carthaginians, and around it arose by degrees the houses, public buildings, streets, etc., of this great city. It is the last spur of the natural range of hills which extend westward

from Sidi Bou-Said, on which were grouped some of the most celebrated public buildings, such as the Palace of Dido, the Temple of *Æsculapius*, the cisterns, etc. The walls of the fortress themselves were so constructed as to serve as stables for elephants, horses, etc.

The Palace of Dido.—The walls supposed to be those of the Palace of Dido are to the N.E. of the *Byrsa*. On leaving the chapel the path right ahead is followed for about 100 yards, after which, turning to the left, a few vestiges are found supposed to be the remains of the Palace of Dido, which the Carthaginians subsequently transformed into a temple, and which was again rebuilt by the Romans. The view from this spot is grand and extensive. Dido may well have seen from it the departure of *Æneas* and his Trojans, and followed them with her eyes as she burnt upon her funeral pile. She might have done this had not the fiction of this gracious queen been entirely effaced by the labours of modern archæologists. Carthage was founded by a band of hardy navigators, who placed the city under the protection of *Astarte*, who subsequently became humanised under the name of Dido.

Temple of *Æsculapius*.—The Temple of *Æsculapius* is situated under the Chapel of St. Louis; four or five small apses are still visible within the wall enclosing the chapel. This building was destroyed at the close of the third Punic War, when the wife of *Asdrubal* voluntarily perished in the flames with her whole family rather than submit to the Romans (see p. 24). It was subsequently restored by them. The building was entirely of white marble, the columns being fluted. Three magnificent halls were excavated by M. Beulé, who estimated that each was at least 50 metres long and 10 high.

The Forum.—The forum was situated between *Byrsa* and the sea, close to the military harbour. Here public assemblies were held. *Diodorus Siculus* says that it was rectangular in shape, and on one side of it was the temple of *Apollo*. It was from this

¹ The museum was broken into in 1883, and nearly the whole collection of coins and medals, of inestimable value, was stolen; fortunately many duplicates were preserved elsewhere.

direction that the army of Scipio penetrated Carthage, and there he established himself for the siege of the Byrsa. Here M. de Ste. Marie found upwards of 2000 Punic inscriptions in 1875, which he despatched to France in the *Magenta* in September of that year. This vessel was burnt in the harbour of Toulon, but fortunately the antiquities on board were saved.

The Harbours.—The two little lakes to the S.E. of the Byrsa are said to represent the harbours. The ordinary view is this:—The northern lake was originally circular, with a circular island in the middle, and formed the harbour for the fleet. The southern lake was originally rectangular, and formed the mercantile harbour. There was a canal between the two harbours, and another from the mercantile harbour to the sea.

This theory held the field until 1891, when a rival theory was started by Mr. Cecil Torr. His view is this:—The mercantile harbour was formed by a couple of piers. The remains of one of them may be noticed in the sea just behind the disused palace (Dar el-Bey), near the southern lake. This pier ran out at right angles to the shore; and ended at the harbourmouth, which faced southward. From the other side of the harbour mouth the other pier ran parallel to the shore for some way and then curved in, probably meeting the shore below the ruined fort (Borj el-Jedid) on the headland to the north. The war harbour was inside the mercantile harbour; but there is not evidence enough to show whether it was formed by another pair of piers, or whether it lay inland in an artificial basin with two arms of the mercantile harbour in artificial channels on each side of it.¹

Like many of the other principal features of Carthage these ports were destroyed by Scipio, restored by the

¹ The reader will find the arguments for and against this theory in the *Classical Review*, vol. v. pp. 280-284; vol. vii. pp. 374-377; vol. viii. pp. 271-278; the *Jahrbücher für classische Philologie*, vol. cxlvii. pp. 321-322; vol. cxlix. pp. 49-68 and 119-136; and the *Revue Archéologique*, third series, vol. xxiv. pp. 34-47 and 294-307.

Romans, enlarged by the Byzantines, and subsequently allowed to fall into ruin and be filled up after the Arab conquest.

Of the various other temples to Apollo, Saturn, Astarte, Hercules, etc., few or no remains are visible, and the traveller will look in vain even for their foundations; all that has been written on the subject by Falbe, Beulé, Davis, etc., has not fixed their positions beyond doubt, and the subject is not one likely to interest the ordinary traveller.

Cisterns.—Punic Carthage was supplied with water entirely from cisterns constructed to catch and preserve rain-water. These are found in every direction, but there were two great public reservoirs, one near the sea, and the other at *Maalaka*. The first of these is situated close to the fort called Borj El-Jedid. The total length is 139 mètres, and the breadth 37 mètres; they are vaulted and divided into eighteen compartments, two of which contained tanks and circular basins either for distribution or to catch any *débris* brought down by the rain, and allow only clear water to flow into the reservoirs beyond. The cisterns at the *Maalaka*¹ were much larger, but are now in a ruinous condition, and the Arabs of the village make use of them as residences for themselves and their flocks; they had a length of 150 mètres, and a breadth of 225.

It is difficult to say for certain whether these are Punic or Roman; probably they, or others on the site of them, were built by the Carthaginians, and restored or rebuilt at a subsequent period. The ground around them was paved with marble for the collection of rain-water, and there is good reason to suppose that the streets of the city were treated in the same manner, in order that none of this precious fluid might be lost.

When the aqueduct from Zaghouan was subsequently constructed, these reservoirs were used for the reception and distribution of the water.

¹ The word means in Arabic *hanging*, or *connected together*.

The Mäalaka cisterns are hopelessly ruined, but the others have been restored by the Zaghoun Water Company, and utilised for the supply of the neighbourhood. The water is conducted to them by pipes from Zaghoun, and branches lead thence to the Goletta and the Marsa. Great care has been taken to preserve their original form; this was the more easy as all the portions of them below the ground-level, and the vaults of six of the compartments, were in a state of perfect preservation. They are large enough to contain 27,000 cubic mètres of water. Any one wishing to examine the interior should apply *personally* for a card of admittance to Mr. Perkins, the Director of the Waterworks' Company, at their offices in Tunis.

Basilica.—Outside the ramparts of the ancient city, where no doubt it was placed before the edict of Constantine, and in a locality called by the Arabs *Damous-el-Kareta*, a corruption possibly of *Domus Caritatis*, is the great Basilica. It was a remarkable building, not so much on account of the richness of the material with which it was constructed as for its great size and the peculiarity of its construction. The main body of the building was 65 mètres long by 14 mètres wide. It is divided into nine naves, the central nave and transept being wider than the others and forming a cross; on either side of this there were four smaller ones formed by columns of marble and granite, the bases of which are still *in situ*. The four central pillars were the largest of all, and were destined to support a vault richly decorated with mosaics, some of which may yet be seen in the museum. Instead of the ordinary rectangular *naos* and *atrium* there is a semicircular court which had an open gallery round, and a fountain in the centre. This terminated in a *trifolium* or *trichorum*, the walls of which were covered with coloured marbles and the dome with mosaics. This contained a tomb, probably of a martyr. The east end terminated in the usual apse. Beyond this was the baptistery, the font being

octagonal, within a square, with ten flights of steps to descend into it.

All over the floor of the Basilica were innumerable tombs, generally of squared stones, in which were found skeletons lying on lime. No objects of any kind were found in them, excepting nails, showing that the custom of burying in coffins was common. Sarcophagi, in less number, also existed; they were so placed that the tops were on a level with the floor and served as slabs for the inscriptions. The whole of the pavement was a mass of epitaphs; no less than 12,000 or 13,000 fragments have been found, of bishops, priests, deacons, sub-deacons, and readers, *lectores*, as well as holy virgins and martyrs, the last generally recognised by the formula, *Hic sunt reliquie*.

A considerable number of bas-reliefs have also been preserved of the Virgin and Child, the Good Shepherd, Eve after her Fall, the Miracle of the Loaves and Fishes, etc. All these have been transported to the museum.

This, like the Basilica of Salona in Dalmatia, appears to have been built on land presented to the church by a convert to Christianity; traces of his residence, and of the columbaria of his family, have been found under the foundations.

Amphitheatre.—The amphitheatre was entirely of Roman construction. It is situated S.W. of the Mäalaka, and close to the Carthage station of the railway. Little more remains, however, than an elliptical excavation; the stones have all been taken away. This was the scene of the martyrdom of Saint Perpetua and her companions on the 7th March 203. The excavations made here by the Père Delatré in 1881 brought to light a subterranean vault which may have served as the prison of the martyrs or as a den for the wild beasts. In 1894 the excavation was continued, and several fragments of column and architraves were found, also an immense quantity of bones. The vault has been transformed into a chapel, and on the anniversary of Saint Perpetua's martyrdom 1895, a mass was celebrated in

it by Monseigneur Combes, Archbishop of Carthage and Primate of Africa.

Circus.—The circus is situated to the S.E. of the Arab village of Douar ech-Chott, and about 3½ kil. from the temple of Æsculapius. Its outline is easily distinguished, and even some vestiges of the Spina, but all the cut stones have been removed. Its length was 675 mètres, and its breadth 90.

Theatre.—Apuleius describes the theatre at considerable length, without specifying its exact site, but El-Edrisi says that it was W. of the sea-baths. Standing at the great cisterns and looking towards the Goletta, the ruins of this building are seen on the left hand near the sea-shore. It was an edifice of great magnificence, but all its beautiful columns of red and black granite have been dispersed in Europe, and it has proved quite a mine of cut stone for the construction of Tunis.

The history of **Christian Carthage** is no less interesting than that of its earlier days. Owing to its constant intercourse with Rome the religion of Christ was implanted here at a very early date. In the 2nd century there were a great many bishops in the proconsular province, and Agrippinus, the first bishop of Carthage, convoked them in council.

The first recorded martyr at Carthage was St. Namphanion, who was killed in 198 under Septimius Severus. Jocundus and Saturninus followed about the same time. St. Perpetua and her companions were thrown to wild beasts in the amphitheatrè in 203. St. Cyprian was beheaded in 258. Other brilliant names adorn the African Church: Tertullian and Augustine, the latter of whom, born at Tagaste, and partially educated at Medaura, came to Carthage to complete his studies. In his time the see of Carthage numbered 160 churches in the Byzacene, and almost as many in Zeugitana. The names of only twenty-eight bishops of Carthage are, however, recorded, of whom the last, Cyriacus, lived in 1076.

To the E. of the Chapel of St. Louis, and distant about 3000 mètres from it, is the village of **Sidi Bou-Said**,

which is esteemed as holy by the Arabs, on account of a tradition that St. Louis became a convert to El-Islam, and was interred there under the name of Sidi Bou-Said.

Douar ech-Shott.—To the S., little beyond the foot of the mound on which the chapel is situated, is the little village of Douar ech-Chott, consisting of a few houses and a minaret. Between it and the Goletta are several summer palaces of former dignitaries of Tunis.

The traveller should now continue to the N., to the pleasant district of **Marsa**, where the Bey has a palace, and where several of the principal people of the place, and amongst others the Resident-General, and the British Consul-General have their summer residences, surrounded by beautiful olive groves. Cardinal Lavignerie also built a palace on the lower slope of Cape Carthage, the hill on which stands the purely native village of Sidi Bou-Said.

Farther to the N. is *Kamart*, where is a palace, now in a ruinous condition, the property of Si Hameida Bin Ayad, and several modern Arab villas.

A drive may be taken from Tunis to the **Ariana**, about 10 kil. to the N. of Tunis, where are numerous fine villas belonging to Arab gentlemen and to a few Europeans, most of them situated in beautiful gardens.

EXCURSION TO THE GREAT ROMAN AQUEDUCT and the RUINS of OUDENA. This may be done by carriage in a day. They are fully described at p. 320.

EXCURSION TO THE BARDO.

The **Bardo** is distant about half an hour's drive from the town. A train (Italian railway) goes several times a day, but it will be most convenient to drive there. The road passes through the aqueduct built by the Spaniards for the supply of the forts. It is of no architectural interest.

The Bardo used to be one of the most characteristic and interesting of the palaces of Tunis, surrounded by a

wall and ditches, and flanked with towers on which artillery was mounted. But it fell into a state of great dilapidation, and, with the exception of a few of the buildings contained in it, it is now (1895) being pulled down and its material utilised for filling up that part of the lake nearest to the new port.

Of all its interesting public reception rooms only two now exist or are shown to the public. They are on each side of a square terrace, to which access is gained by a staircase guarded by marble lions. They have lately undergone reconstruction, and one of them, at least, is but a shadow of what it once was. The other, where the Bey sometimes still goes through the form of administering justice, and called the *Mahkama*, is handsomely decorated with columns and marble from Carthage.

Close to these public apartments is the *Old Harem*, which is now repaired and utilised as a museum, under the direction of M. de la Blanchère. It was opened on the 17th May 1888 under the name of *Musée Alaoui*. The halls are of great size, very handsomely painted and gilt, and the walls covered entirely with tiles of native manufacture but of European design.

The *Grande Salle* is an immense rectangle, 19 mètres by 16, surmounted by a dome, gilt and painted in the best style of Arab art. On the floor is the great Mosaic from Susa, 160 mètres square, one of the finest which exists in any country. It represents Neptune in his chariot surrounded by fifty-six medallions of gods and goddesses, each set in a beautiful garland of foliage. There are other fine mosaics from Tabarca, Oudena, and other places.

The glass cases contain numerous objects collected throughout the country. Lamps, glass, terra-cotta work, bronzes, and pottery of every kind, from the Punic times to those of the Byzantines. On the staircase are arranged a number of votive stones, dedicated for the most part to Saturn, brought from Ain-Tounga, the ancient *Thignica*.

This leads into the *Patio*, decorated in a very meretricious manner, in which are a number of inscribed stones in the Punic, Libyan, and Latin lan-

guages. Some are of great interest, such as the inscription from the baths of Carthage, others fixing the names of ancient cities. There are also fragments of sculpture and other antiquities. In the *Salle de Musique* and the *Chambres des Femmes*, as they are called, it is intended to have a museum of Tunisian art. These are in themselves gems of art, being decorated in the most exquisite manner with *nuksh hadida*, or arabesque plaster work.

Near the Bardo is the palace of the late Bey, the *Kasr es-Said*, in which the French treaty was signed, and farther to the W. the *Manouba*, where is the palace once occupied by Kheired-din Pasha, then first Minister at Tunis, afterwards Grand Vizier at Constantinople, who sold it, together with his property at the Enfida, to the Compagnie Marsillaise.

EXCURSION TO HAMMAM EL-ENF.

This may be done by railway, several trains running every day, and performing the journey in half an hour. The line passes RADES, the ancient *Mazula*, a small and unimportant village. *Hammam el-Enf*, sometimes erroneously called *Hammam Lif*, "The bath of the nose," from a supposed resemblance to that organ which the hill beyond it bears, is a good deal frequented in summer, but there is no proper establishment there at present. There are several thermal springs, the principal one rising in an old decaying palace built by a former Bey.

The railway goes no farther than this place, but it is intended hereafter to prolong it by *Goramalia* to *Hammamet* and *Nebeul*, both of which are in the rich country terminating in *Cape Bon*. A branch will run from *Fonduk Jedid* to *Menzel-Bou Zalfa*.

BEST ROUTE FROM TUNIS TO ALGIERS.

The most interesting route from Tunis to Algiers is by Constantine, Setif, and the Chabet el-Akhira. There are many places well worth visiting on the way, all of which are fully described in the body of the work.

First day, alternative routes—

- a. Tunis to *Hammam Meskoutin*.
- b. Tunis to *Tebessa*.
- c. Tunis to *Constantine*.

Second Day—

- a. Hammam Meskoutin to *Constantine*.
- b. *Tebessa* to *Constantine*.

Third Day—

Constantine to *Setif*.

Fourth Day—

Setif to Bougie by the *Chabet el-Akhira*.

Fifth day—

- a. Bougie to *Algiers* by railway.
- b. Bougie to *Algiers* by steamer.

These are the mere days of travel, without taking into consideration the time necessarily spent at each place.

ROUTE 29.

Bône to Tunis by Railway.

Distance in Kil. from Bône.	Names of Stations.	Distance in Kil. from Tunis.
..	BÔNE	355
55	Duvivier (junction)	300
65	Medjcz-Sfa	290
74	Ain-Tahamimime	281
79	Ain-Afra	276
91	La Verdure	264
97	Ain-Sennour	258
107	SOUK-AHRAS (junction)	248
116	Tarja (Halt)	239
124	Sidi Bader	231
140	Oued Mougias	215
156	Sidi el-Hennesi	199
165	GHardimaou	190
176	Oued Meliz	179
187	Sidi Meskine	168
199	Souk el-Arbâa	156
210	Bin Bechir	145
222	Souk el-Khamis	133
235	Sidi Zehili	120
248	BÉJA	107
269	Oued Zargâa	86
289	Medjcz el-Bab	66
304	Bordj Toum	51
321	Tebourba	34
330	Djedeida (junction)	25
345	Manouba	10
355	TUNIS . . . . .	..

From Bône to Duvivier, see Rte. 19. 55 kil. *Duvivier*. Junction for Constantine and Algiers. After leaving Duvivier the line takes a turn to the westward and follows the right bank of the Oued Melah, an affluent of the Seybouse, till it reaches

65 kil. *Medjcz-Sfa*, a small village at the junction of the Oued Sfa and Oued Melah. Here it crosses the old carriage road to Souk-Ahras, and winds, now to the E. now to the W. of it, till

74 kil. *Ain-Tahamimime*. Thence it continues following the general course of the road. The village of *Oued Chaham* is seen to the W., above a deep and densely-wooded glen, through which passes a bright clear stream, one of the most attractive spots on the old carriage road. On a cloudless day even Guelma may be seen in the far distance.

At the 76th kil. the line takes a sudden bend to the E., and runs nearly at right angles to its old course for a distance of 6 kil.

At the 82nd kil. it enters the tunnel of *Kef Kerichefa*, 700 mètres in length, and nearly circular in shape, and then returns almost to the place where it had diverged from its general southerly direction. It is most perplexing to observe the features of the landscape; what had been in front of us and on our right hand when we entered the tunnel, now appear behind us and on our left on emerging from it. To the E. of this bend on the line may be seen at some distance the forest of Kef Djemel, the property of Captain Hope. This is almost the last remaining resort of the red deer in Algeria.

91 kil. *La Verdure*. The village is about a kilomètre and a half to the W. This is about the centre of the beautiful forest of *Fedj el-Makta*, which consists principally of cork oak; but there is a sufficient diversity of other trees to give variety to the tints; while the numerous streams descending from the mountains, among a thick undershrub of heath, bracken, broom, and white thorn, delight both ear and eye in a manner not often enjoyed in North Africa.

97 kil. *Atm-Sennour*. Not far from this place is an effervescent spring, the water of which is an excellent substitute for soda-water.

107 kil. **Souk-Ahras**. Pop. 5376. 2067 feet above the sea. The modern town has a considerable trade in wool and cattle, and large quantities of phosphate and alfa fibre are brought by the Tebessa railway. It was formerly the seat of government of the great tribe of *Hanencha*, after whose revolt in 1852 it was created a military post, which became the nucleus of the present town. Its position, 60 kil. from the Tunisian frontier and at the junction of the roads from Tunis to Constantine, Tebessa and Bône, contributed greatly to its prosperity.

It is surrounded by fine forests; there is abundant water-power for mills and other similar industrial establishments; the soil is good, and much of it is capable of irrigation; its climate is temperate and salubrious, so that there is every reason to suppose that it may one day become a place of importance.

In January, 1871, after the mutiny of the Spahis at Ain-Guettar, the Arabs around rose in revolt, burnt the neighbouring farms, assassinated defenceless colonists, and invested the town. The women, children, and sick were put into the borj, the streets were barricaded, and every possible precaution made for defence. On the evening of the 26th the insurgents attacked the town, but were driven off after a combat of two hours. The place was relieved on the 31st of January by a column from Bône, under command of General Pouget.

Souk-Ahras was only identified as the ancient Tagaste by an inscription found on the spot, in 1844, when a column under General Randon passed through the district. It seems never to have been of great importance, though it is mentioned by Pliny as one of the free cities. It owes its renown entirely to having been the birthplace of St. Augustine (13th November A.D. 354), whose father Patricius was a person of modest rank, a decurion of the city, and struggled hard

to give his son the best education within his means. He died when St. Augustine was only seventeen years of age. He was converted to Christianity by his saintly wife, Monica.

The first years of the Saint's life were passed at Tagaste, and at sixteen he was sent to Madaura (see p. 244), a city which offered greater educational facilities; here he remained a short time, and was then sent to continue his studies at Carthage, in the school of rhetoric, where he soon took the first place.

In 373 he returned to Tagaste, where he taught grammar, and where for nine years he lived in a manner to cause the most profound affliction to his mother, as he tells us in his *Confessions*. His old schoolfellow and lifelong friend, Alypius, subsequently became Bishop of Tagaste.

There are some Roman ruins round about, but nothing of exceptional interest.

[An interesting excursion from Souk-Ahras is to the ruined Roman city of **Khamisa**, at the source of the **Medjerda** (see p. 247).

This river is formed by two streams, one of which flows from the W. and the other from the S.W. The first of these rises at Khamisa, and the other, called the *Oued Mellegue*, during the greater part of its course, and the *Oued Chabro* near its source, descends from the plateau of Tebessa.

The modern name is a corruption of the Roman one *Bagrada*, and this again is merely a form of the Punic one *Makarath* or *Bakarath*.]

6 kil. After passing Souk-Ahras, the line strikes the Medjerda, which it does not again quit until it approaches Tunis. The river flows through a succession of picturesque gorges, amongst well-wooded hills; the line follows generally its left bank, but it crosses the river thirteen times between Souk-Ahras and Ghardimaou.

116 kil. *Tarja*.

124 kil. *Sidi Bader*.

140 kil. *Oued Mougras*.

156 kil. *Sidi el-Hemessi*.

160 kil. The bridge which is here crossed marks the boundary between Algeria and Tunis.

165 kil. **Ghardimaou**, frontier of Tunisia.

This must have been a place of some importance in Roman times, as an inscription was found here regarding a "Sacerdos provinciae Africæ," who belonged to the neighbourhood.

176 kil. **Oued MELIZ** (more correctly *Mehliz*). At 3 kil. to the N. of the line is **Chemtou**, where were fine quarries of *Numidian marble*, now nearly exhausted, and the extensive ruins of the Roman **Simittu**, **Simittus**, or **Colonia Simithensium**.

This place is mentioned in the Itineraries as one of the stations on the road from Hippo Regia (Bône) to Carthage, but beyond this nothing is known of its ancient history, and in modern times, until the railway was opened, this part of the country was difficult of access and remote from the usual routes of travellers.

Close to a spot where one of the numerous streams called *Oued el-Melah*, or "Salt River," flows into the Medjerda, is situated a line of small hills covering an area of about 90 hectares, the highest point of which is 260 mètres above the sea-level. They are composed almost entirely of marble of various kinds, but principally of *Giallo Antico*, rose-coloured marble, and a brownish breccia. There can be no doubt that these quarries were extensively worked by the Romans; large excavations made by them exist in various places, and numerous inscriptions have been found on blocks which had been extracted but not carried away. A Belgian company here erected extensive premises, and a branch railway, crossing the Medjerda by an iron bridge, and joining the main line a little to the E. of the station of Oued Meliz.

The plain on both sides of the hills is covered with extensive Roman remains; the city must have been a very considerable one, owing its existence to its marble quarries. The name of the place is found in several in-

scriptions, both on tombstones and millitary columns, some of which have been collected in the garden of the director. One of the latter is curious, as it gives the name of a road which passed here:—

VIA
VSOTHA
III

Another is more interesting still, as it indicates the construction by Hadrian of a road destined no doubt for the transport of the marble from Simittu to the sea at Tabarca, probably about A. D. 129.¹

The most prominent ruin in the landscape is that of a long *aqueduct*, which commenced about 7 kil. distant among the hills to the W., crossed the *Oued el-Achar* by a bridge, still entire, and entered a series of seven vaulted cisterns about 2½ kil. from the marble works. Thence it passed, partly underground and partly on a long line of arches, crossing the *Oued Melah* by a bridge, now fallen, till it terminated at the *Thermae*, in the middle of the city. The masonry is not of a particularly fine quality, the plinths of the piers are of large blocks of cut stone, but the masonry above them is of a common rubble, and the voussoirs of the arches are of hammer-dressed stones. Here and there a section of the aqueduct may be seen entirely of cut stone; these mark a reconstruction at a period subsequent to the original work. In one pier may be seen as many as four tombstones, some of them upside down; another pier has one such tombstone, and probably many more were used, the inscriptions of which are turned inwards. The necropolis was in the hills close by, and as there are very few stones now existing there, it is probable that the greater part of them were used for public works.

Close to the end of the aqueduct are the remains of the *Thermae*, a large building, but of poor construction;

¹ These inscriptions have been published in the *Revue Archéologique*, by the Rev. Père Delattre, in April and July 1881, and in May and October 1882.

the mosaic floor, where visible, is rude, the tesserae being of brick, and nearly 5 cent. long by $1\frac{1}{2}$ broad. Farther N. is the *Theatre*; the scena has entirely disappeared, but the caeua is nearly complete. The building is situated close to the river, with a fine view in every direction. There is also an *Amphitheatre* at some distance to the E., but it is in a very dilapidated condition, and could never have been a fine building. There are many other structures more or less ruined, one of which appears to have been a *Basilica*.

But the great feature of the place is undoubtedly the colossal *Bridge* over the Medjerda; it is a work of great magnitude, the southern side is nearly complete, but the rest lies in huge masses, encumbering the bed of the river, as if broken up and tossed about by some great convulsion of nature, to such an extent that it is almost impossible to make out its original plan. It seems to have crossed the river at an obtuse angle, and down stream on the north side there are a number of parallel sluices, with grooves for gates, as if it had also served as a barrage for the irrigation of the plain. The bed of the river has been worn away far below its original level, so that the foundations of the piers are left in the air and entirely exposed. The bridge bears evident proofs of having been rebuilt, like the aqueduct; tombstones having been freely used. The great mass of the masonry is of rubble, almost entirely of waste marble from the quarries, faced with immense blocks of cut stone. Indeed, throughout the whole city there is no appearance of the marble, so near at hand, having been used in blocks for any purpose; probably it was too valuable, and was all exported to Rome. The record of the reconstruction of the bridge is contained on another marble slab now lying in a field on the right bank of the river; an attempt was made to carry it off, but owing to its great weight and size this failed. It proves that the bridge was reconstructed by Trajan from its foundations after he had assumed the title of Dacicus, but before the Arabian

and Parthian campaign, probably about A.D. 105. It formed, most probably, the point of departure of a road from Simittu to Sicca Venerea.

187 kil. *Sidi Meskine*. The line now enters a broader part of the valley, still running along the southern side of the river.

199 kil. *Souk el-Arbâa*. An entrenched camp formed by the French on the site of an Arab market held here every Wednesday, hence its name, and now fast rising into an important town.

This is a convenient starting-point for various excursions, and there is an auberge at the station, with limited accommodation, where the traveller may put up in comfort. He may visit Chemtou, just described; the Khomair country, Ain-Draham, and so on to Tabarca by diligence (see p. 315); and El-Kef (p. 318). The only attraction in the immediate neighbourhood is the ruined city of *Bulla Regia*, called *Henchir Hammam Darradji* by the natives, situated about 7 kil. from the station, at the foot of Djebel el-Arabia, one of the hills which bound the north side of the valley of the Medjerda. Its position was no doubt determined by a copious spring of sweet water, which, in this region of brackish rivers, was a priceless treasure. It was probably the residence of some of the Numidian kings, and it subsequently became a *liberum oppidum* under the Romans. It is mentioned in the Itinerary of Antonine as a station on the route from Hippo Regia to Carthage; but beyond this little is known of its history, and there are no inscriptions existing on the spot as at Chemtou.

The extent of the ruins can best be seen by ascending the hill for about 300 yards beyond the ruined amphitheatre; they cover an area of many acres, and consist of large buildings and numberless smaller vaulted edifices now buried in the soil, generally above the spring of the arches. In the centre, to the north, is the spring which rose in a large semicircular *nymphæum* of cut stone, from which leaden pipes issued for the distribution of the water in various directions. Immediately in

front of it was an archway built of large blocks of very compact and finely cut limestone. This was destroyed in the most reckless manner to supply building material for the railway. The spring has been enclosed in a *Château d'eau*, and part of its water is conveyed in iron pipes to Souk el-Arbâa, which used to be supplied with water brought from Tunis by rail. The surplus forms a marsh farther down, full of eel and barbel, of great size. Only a small spot on the edge of the reservoir has been cleared to its original level; here a fine mosaic pavement has been discovered, and, to judge by the remains lying about, this must have been a beautiful spot, decorated with temples and colonnades, somewhat like the well-known example at Zaghouan.

Lower down the valley, almost due south of the spring, are the *Thermae*. Like all the other buildings here, this has been destroyed by an earthquake; huge masses of masonry lie around, disjointed and overthrown, in a manner that could not have been effected by any other agency. One high arch still remains entire. As the rest of the structure is buried in *débris* nearly to the crown of the vaults, there is great hope that valuable works of art may one day be found here; in the meantime the earth and the ruins that encumber it ensure their preservation.

Between the spring and the baths, but a little to the east, is the *Theatre*, also much buried in earth. One can descend in some places into the corridor and form a good idea of the nature of the building. The masonry is of the finest cut stone. The *Auditorium* is entirely filled up; and only one square pier, showing the spring of an arch, exists on the right side of the *scena*.

At a considerable distance farther E. is the *Amphitheatre*, even more destroyed, and apparently of an earlier age. The masonry is of less regular rubble, with only cut stone angles. Like all similar buildings, it commanded a splendid view of the country round.

There are many other edifices, some of great size. One has all its chambers and vaulted roofs in perfect preserva-

tion, and was used as a residence by the workmen engaged in laying down the water-pipes. Here also is a series of eight contiguous cisterns, of great size, too high to have been filled by the spring; probably they were intended for the collection of rain water, which the Romans in North Africa were more accustomed to use for drinking purposes.

After leaving Souk el-Arbâa the line passes to the N. bank of the Medjerda, near its junction with the *Oued Mellegue*, its principal affluent, which also rises in Algeria, N. of Tebessa.

210 kil. *Bin Bechir*, near the confluence of the *Oued Tessâa*.

222 kil. *Souk el-Khamis*.

235 kil. *Sidi Zehili*. The upper plain of the Medjerda terminates here, and the river pursues a more tortuous course through undulating and hilly country.

248 kil. **Béja** (more correctly El-Baja). The station is 12 kil. distant from the town, but a branch line leads to it. In the garden of the station repose the victims of the massacre of Oued Zargâa; a monument has been erected by the railway employés to their memory. The road crosses an old Roman bridge immediately after leaving the station.

Béja is mentioned by Sallust under the name of *Vacca* or *Vaga*; the latter was probably the authentic one, as it is found on more than one inscription still existing. During ancient and mediæval times it was renowned for its richness and commerce. Sallust says that it was a regular resort of Italian merchants, *ubi et incolere et mercari consueverunt Italici generis multi mortales*.

It has ever been one of the most important corn markets in *Ifrikia*, by which name the northern part of the Regency has always been called since it was the *Provincia Africa* of the Romans.

El-Edrisi (A. D. 1154) says: "It is a beautiful city, built in a plain extremely fertile in corn and barley, so that there is not in all the *Moghreb* a city so important or more rich in cereals."

El-Bekri calls it the granary of Ifrikia, and says that its soil is so fertile, its cereals so fine, and its harvests so abundant, that everything is exceedingly cheap, and that when there is famine elsewhere, here there is abundance. Every day, he says, 1000 camels and other beasts of burden carry away corn, but that has no influence on the price of food, so abundant is it.

It is situated on the slope of a hill, with a commanding view of the plain beyond. The selection of the site was, no doubt, influenced by the existence of a copious spring of fresh water, which the Romans carefully led to a central position and enclosed within a vaulted chamber of their usual solid construction; this exists uninjured to the present day, but the drainage of the town has been allowed to flow into it and pollute its waters.

The ancient city was surrounded by a wall, flanked by square towers, and on the culminating point of the enclosure was situated the citadel. No doubt this was originally constructed by the Byzantines; the trace was adopted by the Arabs; but as the walls were not continued as the town extended, they soon ceased to surround it, and were allowed to fall into decay.

The old Byzantine citadel has been almost entirely pulled down and replaced by comfortable, if not picturesque, French barracks. Only the central keep remains, formerly the prison, now a *dépôt* for military stores.

A curious discovery has been made at the *Bab es-Souk* or market gate, which shows how much the level of the town has been raised by the ruins of successive ages. One-half of the old Roman double gate has been interred below the bottom of the present one, which stands above the other half.

In the outer wall of the *Jamâa el-Kebir*, or principal mosque, dedicated to *Sidna Aïssa* (our Lord Jesus), is a remarkably interesting inscription, which was first noticed by M. Guérin, proving that this had originally been a Christian basilica, and that it had

been restored and embellished during the reigns of the Emperors *Valentinianus* and *Valens*, A. D. 364 to 368.

Dyeing is carried on to some extent at *El-Baja*, but the only distinctive manufactures of the place are wooden sandals used by the women, very tastefully carved out of light wood, generally with an old razor.

In the vicinity of the town is a ruined palace and neglected garden belonging to the Bey, which, like that at Tunis, is called the *Bardo*. This existed as far back as 1724, when *Peysonnell* visited the place.

269 kil. OUED ZARGĀA (Gray River). Here took place, on the 30th September 1881, a massacre of railway workmen of a very horrible character by the insurgent Arabs. Having torn up the line on each side of the station, they attacked and burnt the buildings; M. *Raimbert*, the stationmaster, was burnt alive; and ten other employés, principally *Maltese* and *Italians*, were murdered.

Here commence a series of wild gorges and picturesque ravines, through which the *Medjerda* finds its way from the narrow *Béja* valley into the broader *Tunis* plain. It makes a deep curve to the south towards *Testour*, and both river and line approach each other again at

289 kil. MEDJEZ EL-BAB (Medjez of the Gate). This is a station on the carriage road between *Tunis* and *El-Kef*; the town is about 3 kil. from the station, to the S. of the *Medjerda*. The river is here crossed by a Roman bridge, beyond which is a triumphal arch of the simplest construction, whence the modern name, "The Passage of the Gate."

304 kil. *Bordj Town*.

321 kil. TEBOURBA. *Teburbo Minus* on the left bank of the river.

330 kil. DJEJDEIDA.

[This is the junction for the line to *Bizerta*. It runs in a north-westerly direction to *Matour*, an important commercial and agricultural centre, through a rich and well-cultivated country. It then passes between the *Lake of Mount Ishkul* (p. 136) and that

of Bizerta (p. 133); it passes the N. end of the latter, and after a course of 72 kil. reaches the new town of **Bizerta** (*q. v.*)

The itinerary is as follows:—

Tunis.
Djedeida.
Sidi Othman.
Mateur.
Sidi Ahmed.
Bizerta.]

345 kil. *Manouba*. Before reaching this station the line passes through a portion of the great aqueduct of Carthage (p. 320), of which two entire piers and three arches have been wantonly destroyed to enable the line to pass through, whereas by making a very short detour to the right or left this might have been avoided.

This portion of the aqueduct is so different from that met on the way to Zaghouna as to merit a detailed description.

The piers, 4.75 mètres apart, measure 4.60 mètres by 3.68 mètres, constructed of *pisé* or rammed earth, in blocks about 1 mètre thick, and standing on a solid cut stone foundation of varying depth, but faced with a broad square plinth of *pisé*. The voussoirs, about 0.69 mètre wide, as high as the intrados of the arches, are of cut stone, but the masonry is irregular. The spandrels and the walls of the duct, which was vaulted and lined with cement, are also of *pisé*. The duct is high enough for a man to pass. There is a band of cut stone at the springing of the arches, but no indications of any mouldings. The construction of the piers is peculiar. There being no quarry sufficiently near for the purpose, the Romans adapted the materials ready to hand. They made a good solid foundation for each pier, and then built the superstructure with carefully rammed earth mixed with lime in layers of 1.07 mètre. On the upper surface of each layer they formed (while the material was still soft) channels about 0.16 mètre square, laying within them strips of olive wood, about 0.16 mètre wide and 0.03 mètre or more thick. Over these was

spread a layer of strong mortar, partly mixed with wood ashes, and from 0.05 mètre thick, wooden pegs 0.16 mètre long being driven through the mortar and laths into the *pisé*. This kind of framework was repeated to the summit of the aqueduct. The laths and pegs are still undisturbed, and the piers are perfectly true, and some of them free from fractures. The aqueduct in the centre of the plain would vary from 21 to 24½ mètres in height. The Arabs have from time to time taken away every bit of lath within reach, and cut away the foundations for the sake of the stones.

The palace of the Manouba was formerly the country residence of Kheir ed-din Pasha; a cavalry station has been built in the neighbourhood.

355 kil. **Tunis** (*q. v.*)

ROUTE 30.

Excursion in the Country of the Khomair.

The country of the **Khomair** (sing. *Khomiri*, incorrectly written *Kroumir*) is situated on the Tunisian side of the boundary line between Algeria and Tunis. It has a breadth of sea coast of about 25 kil., and a depth, in a southerly direction, from Tabarca to Fernana, of 51 kil. In all the maps of Tunis before the French occupation this country was simply a blank space, and little or nothing was known of its inhabitants. Their manners were reported to be almost brutal; and as their territory was inaccessible to any force that the Bey could send against them, no one dared to approach their mountains, or if an expedition did enter, the soldiers were either massacred, or the Khomair themselves dispersed into the interior, where pursuit was impossible; their numbers were reported to be very great, but were much exaggerated, and having but little to lose, they preferred independence and poverty to a more quiet and settled life under Turkish

rule. When they were too much pressed by want, they had only to replenish their resources by incursions on either side, and they plundered indiscriminately both the subjects of the Bey and the Arabs of Algeria. Thus, shut in between the two countries, they managed to preserve their independence, a thorn, no doubt, in the flesh of both, but one which was willingly endured by the Algerian authorities till the moment should come when their depredations would give the necessary excuse for the invasion of the Tunisian territories. How the "invention of the Kroumirs" actually did lead to the French protectorate of Tunis is matter of history.

The author, with one companion, passed through this country in 1876, and he believes that no other European traveller had ever previously been permitted to do so.¹ He again traversed it in April 1884 by excellent roads. Not an armed *Khomiri* was to be seen. The men were all engaged in ploughing the land for next season's crops, while the women were clearing the weeds from among the growing corn; all seemed to have a friendly word or salutation for him, and he saw none of the black looks and scowls which he had noticed on his former journey. The appearance of the people, however, was lean and miserable; they were covered with disgusting rags, and their huts were of the most squalid description, hardly comparable to any save those in use amongst a savage people like the *Andaman Islanders*.

La Calle should be taken as the starting-point for this expedition, and the traveller may either go to *Ain-Draham* by the direct carriage road, or make a detour to *Tabarca*, and so to *Ain-Draham*. The latter is highly to be recommended, the scenery is varied and beautiful; but accommodation at *Tabarca* cannot always be depended on. We give this route, but the traveller should inquire at *La Calle* if it be practicable.

After leaving *La Calle* the coast

¹ See *Travels in the Footsteps of Bruce*.

runs E.N.E. through fine cork forests, and then skirts the lake of *Tonga* or *Guerrah el Hout* (Lake of Fish). This is an immense freshwater marsh in summer, although a lake in winter; it is most pestilential, and its influence is felt as far as *La Calle*.

7 kil. *Oued Messida*. This stream is the communication from the lake into the sea. It forms a small creek much frequented by coral boats; steamers anchor off it and take in their cargo of ore, which is brought down from the mines by a line of railway. Beyond is a hill called *Kef Chetob* by the Arabs and *Monte Rotondo* by the Europeans; from its isolation and conical form it is a very prominent feature in the landscape.

13 kil. *Kef om-et-Teboul*. A little village which has sprung up around the mines of the same name. They produce argentiferous and auriferous lead and zinc ore, all of which is shipped to *Swansea*. During 1883 twenty steam vessels took on board upwards of 26,000 tons of ore.

Here the direct road to *Ain-Draham* continues to the S.E.; that to *Tabarca* branches off to the N.E. through a wild and mountainous country, intersected by deep ravines, and covered with dense brushwood, with here and there patches of forest containing oak of various species and maritime pine. It crosses the frontier at some distance from the sea, passing over the high range of hills which terminates in *Cape Roux*; it then descends to the coast, which is here beautifully indented, with charming views of land and water at every turn, till at last the island of *Tabarca* and the *Bordj Djedid*, high above the town, come in view.

36 kil. *Tabarca* (see p. 131). A diligence runs daily from this place, passing *Ain-Draham* to *Souk el-Arbâa*.

After leaving *Tabarca* the road ascends the broad valley of the *Oued-el-Kebir*, nearly due south. The ground, wherever possible, is cultivated, and will one day no doubt be opened out to European colonisation. At present, like all plains in North Africa when undrained and only cultivated in the rudimentary manner employed by the

Arabs, it is very unhealthy, but in due time this will be remedied. No places could have been worse or are now better than many parts of the Metidja near Algiers.

All over the country there are ruins of Roman farms or fortified positions; for the most part they are merely heaps of stone, though generally of large blocks finely cut. One of these, 5 kil. from Tabarca, is of a more important character; part of the walls and one-arched gateway are still standing; it is close to the river, and is called *Kasr Zeitoun*, "Palace of the Olive Tree," from a group of gigantic olive trees which grow around it and in its deserted chambers.

17 kil. from Tabarca is the *Oued Kerma*, a beautiful clear stream, so called from a large fig tree growing near it. A road bifurcating to the N.E. leads to the *Camp de Genie*. Beyond the scenery becomes wilder and more beautiful, consisting of great stretches of oak forest interspersed with glades of cleared and cultivated land.

26 kil. *Col de Babouch*. The junction of this road with that leading up from Kef om-et-Teboul, where is a Tunisian custom-house. The road now passes through a forest of the most splendid oak trees, the branches of which are covered with moss and ferns. The effect of the bright green ferns on the silver gray boughs of these gigantic trees is most striking; indeed, the whole route forms a series of studies for a landscape painter. At last *Ain-Draham* comes suddenly in sight, perched high above, on a bleak hillside, its regular houses and huts of wood with red-tiled roofs forming by no means a pleasing contrast to the beauty of the landscape through which the traveller has passed.

31 kil. *Ain-Draham*. This post is situated at 41 kil. from La Calle by the high road passing *Om-et-Teboul*, *El-Aioun*, and the *Col de Babouch*; it is 800 metres above the level of the sea, and is well supplied with water from the "Spring of Money," whence its name, and other fountains. Before the French expedition it was perfectly

uninhabited, but immediately after that event it was occupied by a garrison of 3000 men under a general of brigade; now it has been reduced to a small detachment, to the despair of the auberge and storekeepers who have settled here, and who can have no possible occupation but that of supplying the troops and feeding the officers.

No attempt at defence has been made, no redoubt, no retrenchment, or even the simplest walled enclosure. The barracks of the soldiers and the houses of the settlers cover a considerable extent of ground, and although the *Khomair* have been disarmed, no one really supposes them to be destitute of weapons. Insurrections have occurred in Algeria under more unlikely circumstances, and it is not impossible that some day a rising of this warlike tribe may temporarily endanger French supremacy.

It is impossible not to be struck by the extraordinary results which have followed the French Protectorate in this once inaccessible region. Admirable roads have been made in all directions, and no serious fears need ever be entertained for the permanent security of the country.

The view from *Ain-Draham* is remarkably fine, especially towards the sea; one sees down the whole length of the valley through which the road passes, and the *Galita Islands*, not visible from *Tabarca*, appear as if they were only a few miles distant.

An excellent road conducts to *Souk el-Arbâa*, and a diligence passes daily from it to *Tabarca*. The first part of the road lies through splendid oak forests; but as it descends these gradually become replaced by brushwood, and finally by open undulating ground more or less cultivated.

5 kil. *Fedjel-Meridj*. A small grassy meadow nestled amongst wooded hills. This evidently was a Roman post, as in the centre of it is a mound of stones; the best have been taken for the construction of the road; but a military column has been spared and erected on a plinth. It bears the names of *Constantine* and *Licinius*, thus fixing the

date prior to the defeat of the latter in A. D. 323. It also bears the number xviii., probably *millia passuum* from Bulla Regia.

20 kil. *Fernana*. This place derives its name from a gigantic cork oak, the only tree within several miles. It is on the southern boundary of the Khomair country, and used to be the extreme limit to which the Bey's camp was permitted to come in its annual circuit for the collection of taxes. Here the chiefs used to meet it and hand over such sums as they felt disposed to pay; if the Tunisian soldiery advanced a step farther the taxes were liable to be paid with powder and lead.

After the occupation of Ain-Draham a strong column encamped here for many months, and it has left a memorial of its stay in a large and crowded cemetery. There is an auberge or shanty here, at which it is possible to breakfast but not to spend the night.

Close to Fernana, and again at the *dowar* below mentioned, are found two miliary columns of Trajan's road to Tabarca. "*Imp. Cæsar divi Trajani Parthic. fil. divi Nervæ nep. Trajanus Hadrianus aug. Pontif. max. trib. potest xiii. Cos. iii. p. p. viam a Simittu usq. Thabracam fec.*"

35 kil. *Dowar ef El-Hadj bel Kassem ben Zorari*. Opposite this a cross-country path, but one quite practicable for carriages, branches off to the E., and leads to the important Roman ruins of *Bulla Regia* (see p. 312).

42 kil. *Souk el-Arbâa* (see p. 312).

ROUTE 31.

Tunis to El-Kef via Souk el-Arbâa.

This can be done in one day. Leave Tunis by the early train at 5 A.M., arrive at Souk el-Arbâa at 10.49. Start by diligence at 3 P.M., and arrive at El-Kef about 8 P.M. The diligence has six seats, and is not generally well horsed. The traveller should not fail to take provisions for the way.

The road from *Souk el-Arbâa* runs directly south over the plains of the Medjerda.

9 kil. It crosses the *Oued Mellegue*, an affluent of that river, at a place fordable in summer, but in the winter months a ferry-boat has to be used. Extensive remains of Roman farm-houses are seen, but nothing of special interest. The road gradually ascends the mountains through a vast tract of heath-land, partly cultivated, and affording pasturage for numerous flocks of sheep and goats. The view of the plain round Bulla Regia and of the Khomair mountains is very extensive.

28 kil. Resting-place for horses in connection with the diligence service.

About a mile to the W. is the picturesque Arab village of *Nebeur*, where once stood a Roman *Castellum*, dependent on the colony of Sicca; close by is a magnificent olive grove, and the white koubba of *Sidi Bou Jubar*. On the hill behind the resting-place is the ruined koubba of *Sidi Merzoug*, built of pre-existing Roman work. Several inscriptions have been found here, amongst others one showing that justice was administered here by one of the supreme magistrates of Sicca. There are also many fragments of cornices belonging to the Ionic order, and several moulded stones. From its commanding position this was probably a military post of some importance.

There are two roads from Nebeur to El-Kef; one by the plains, 38 kil., of easy ascent, but little used. The other over the mountains, 18 kil., very bad and steep; in some parts scarcely passable for carriages. A new road has been commenced at the Kef end, but it has apparently been abandoned.

38 kil. Here the road, after a long ascent, becomes more level; scenery wild and mountainous; on the right commences a long range of precipitous limestone rock, rising in some parts nearly 200 feet above the road. Here, at its greatest altitude, the French have established an optical telegraph station, visible at El-Meridj and Ain-

Draham. The panoramic view is most extensive; on the left one overlooks the field of Zama, the exact position of which city is still a mystery; in front the eye traces all the Tunisian frontier.

45 kil. Here the road, still following the precipice on the right, takes a sudden turn towards the west, and the walls of *El-Kef* come in view, the *Kasba* only being seen above them.

46 kil. After passing the Arab and Jewish cemeteries, you enter either the upper or lower eastern gate.

El-Kef. The ancient city of *SICCA VENERIA*, or later *Colonia Julia Cirta Nova*, of which *El-Kef* occupies the site, was much larger than the modern town; it was one of the most important places in Punic territory long before the Roman conquest of the country, and was probably founded by a colony of Phœnicians, who introduced into it the worship of the Asiatic Venus, which subsequently gave the place so evil a repute. As no traveller should visit the *Alhambra* without studying Washington Irving's tales, so the visitor to this interesting spot will find a picture of what were probably the manners and customs of the early Christians and their oppressors here, in the pages of Cardinal Newman's beautiful tale, *Callista*.

The city, as at present existing, is of irregular shape, enclosed by loop-holed walls, and built on the steep slope of a rock (whence its name) facing the S.W., and immediately under the precipitous crag above mentioned. It is a veritable city in the air, a mere excrescence on the rock. It is essentially Arab, the European population numbering under 100, mostly Maltese. The entire population is estimated at 4000. The streets are dirty and ill-paved, but owing to its position, and being well supplied with water, the town is easily washed. The rich plains below have contributed to the prosperity of the inhabitants, but at present many dwellings are unoccupied and in ruins. The town is built entirely with the remains of the Roman city, portions

of which still lie below the surface. There are many Roman inscriptions built into the walls of Arab houses, and therefore difficult of access. The principal remains consist of fragments of a temple of large dimensions, but of coarse ornamentation; near it were lately found the white marble statues of two emperors and of an empress, but without heads, and two without arms. The *Thermæ* can still be traced, the masonry is of large blocks put together with very little mortar, the openings in the walls are spanned by lintels of great size, many of the stones being more than 2½ metres long. The walls are fairly perfect up to the spring of the vaulting, and the apsidal end of a chamber, with its flat rib vaulting, is quite perfect, and is now the residence of an Arab.

The *Kasba*, occupied by the French, and forming the pinnacle of the city, is of Roman construction. The town has six gates and six mosques, but of no pretensions exteriorly.

Outside the walls are the old Roman *cisterns*; they are constructed on a platform above the *Kasba*, and immediately under the precipitous rock before mentioned. They consist of thirteen vaulted chambers side by side, 27 metres long, nearly 7 metres wide, and 6'40 deep. Except where the vaulting has been broken through they are fairly perfect, the cement lining being in many parts as sound as when it was applied. Some of these chambers are used by the soldiers for gymnastic purposes, one being styled "Salle de billard," and another "Salle d'escrime." These *cisterns* were supplied from a spring in the rock, and were connected with the fountain within the walls by a short tunnel, which is still perfect, but closed up. The city is now supplied from the same source, and a line of pipes communicate with the fountains. The supply is never ceasing; it comes splashing in at the rate of many thousand gallons a minute, and there is always a busy gathering of men and women, horses and cattle, in the little sloping square in front of it.

Outside the E. gate are *cemeteries*;

the tombstones of the small Jewish burial-ground are mostly Roman, some with the Latin inscriptions still legible. The Christian cemetery, close by, is the site of an old Christian basilica, about 27 mètres long and 15 wide. The shafts dividing the nave and aisles appear to have been of gray marble, 0·51 mètre in diameter. The external walls were very thick, those of the apse being 0·50 mètre; all of large blocks from the Roman town, and some of them inscribed. M. Saladin thinks that it would be quite possible to restore this basilica, and when there is a sufficiently large population to require a church it would be even more economical to do so than to build a new one.¹

The French Government has done wisely in erecting barracks for the troops outside the Arab town, on the highest ground, close to the Kasba, and well sheltered between the city walls and the upper range of rocks, forming a plateau at the top of the mountain.

There is a carriage road from El-Kef to Souk-Ahras; a horse track to El-Meridj, and a new road has been constructed direct to Tunis. The troops have also made routes from Kef to Souk el-Djemâa and to Kerouan by Muktar.

ROUTE 32.

Excursion to Zaghouan and Oudena.

This expedition can be done in two days, in a carriage and four, which ought not to cost more than 50 f. There is an inn at Zaghouan, where it is quite possible to sleep. No provisions of any kind are obtainable on the road.

The traveller leaves Tunis by the Bab Alleoua, by a road which has been cut through an Arab cemetery surrounding the shrine of Sidi Ali ben Ahsan. The heights above are crowned by the picturesque forts, which are

¹ *Nouv. Arch. des Miss. Sc. et Lit.*, 1892, tom. ii.

prominent objects in the landscape from every point of view round Tunis. The ground being somewhat undulating, the great salt marsh or lake, called Sebkhâ es-Sedjoui, which extends to 8 kil. to the south-west of the town, is concealed from sight till its southern extremity is approached. During the winter months this contains a considerable body of water, but in summer it becomes little more than a fetid marsh, with a broad efflorescence of salt around its margin.

At 17 kil. from Tunis is the Mohammedia, an immense ruined palace, or rather a mass of palaces, built by Ahmed Bey, who died in 1855, at an expense of many millions of piastres, and decorated with great magnificence, but which since his death has been allowed to go to decay. It has served as an inexhaustible mine for materials with which to build and adorn other palaces; its marble columns have disappeared, its walls have been stripped of their covering of tiles, the roofs have nearly all fallen in, and it is impossible to imagine a more perfect picture of desolation than is presented by this modern ruin.

The aqueduct from Zaghouan passes through one of the courts of the palace, but it is here low, and by no means a striking object.

Beyond, at short distances, may be noticed what seems to be small koubbas; these are inspection chambers, to facilitate the repairs of the aqueduct.

Shortly after leaving the Mohammedia the ruins of the ancient aqueduct come in sight, and at a distance of about 22 kil. from Tunis the road crosses the Oued Melian, the Catada of Ptolemy. Here is seen, in all its surpassing beauty, one of the greatest works the Romans ever executed in North Africa, the aqueduct conveying the waters of Zaghouan and Djougar to Carthage.

During all the time that Carthage remained an independent state, the inhabitants seemed to have contented themselves with rain water, caught and stored in reservoirs, both from the roofs of houses and from paved squares and streets. Thirty years after the de-

struction of this city by Scipio it was rebuilt by a colony under Caius Gracchus; but it was not till the reign of the Emperor Hadrian (A. D. 117 to 138) that the inhabitants, having recovered their ancient wealth, and having suffered from several consecutive years of drought, represented their miserable condition to the Emperor, who himself visited the city, and resolved to convey to it the magnificent springs of Zeugitanus Mons, the modern Zaghouan. This, however, was not sufficient for the supply of the city, and after the death of Hadrian another fine spring at Mons Zucharus, the present Djebel Djougar, was led into the original aqueduct—probably in the reign of Septimius Severus, as a medal was found at Carthage with his figure on the reverse, and on the obverse Astarte seated on a lion beside a spring issuing from a rock.

It was certainly destroyed by Gili-mer, the last of the Vandal kings, when endeavouring to reconquer Carthage, and again restored by Belisarius, the lieutenant of Justinian. On the expulsion of the Byzantines it was once more cut off and restored by their Arab conquerors, and finally destroyed by the Spaniards during their siege of Tunis. It was reserved for the late Bey, Mohammed es-Sadik, once more to restore this ancient work, and to bring the pure and abundant springs which formerly supplied Carthage into the modern city of Tunis.

M. Collin, a French engineer, planned and executed this work. Of course the advanced state of hydraulic science at the present day rendered it unnecessary to make use of the ancient arches. The aqueduct originally consisted, for a great part of its course, of a covered masonry channel, running sometimes quite underground, sometimes on the surface. This was comparatively uninjured by time, and served, with little repair, for the modern work. Where the old aqueduct passed high over the surface of the country iron pipes and syphons have been substituted.

The contract price was 7,800,000 f., but the work cost the Bey nearly 13,000,000 f.; and, useful as it cer-

tainly is, there is no doubt that it was the commencement of his financial difficulties.

The original aqueduct started from two springs, those of Zaghouan and Djougar; and to within 26 kil. of the present city of Tunis—namely, to the south side of the plain of the Catada—it simply followed the general slope of the ground without being raised on arches. From this point, right across that plain—a distance of 3 Roman miles, or 7 kil.—with slight intermissions, owing to the rise in the ground, and so on to the terminal reservoir at the modern village of Mäalika, it was carried over a superb series of arches—sometimes, indeed, over a double tier. The total length of the aqueduct was 61 Roman m., including the branch from Mons Zucharus, which measured 22 m.; and it was estimated to have conveyed 32,000,000 litres (upwards of 7,000,000 gallons) of water a day, or 81 gallons per second, for the supply of Carthage and the intermediate country.

The greatest difference is perceptible in the style of construction, owing to the frequent restorations which have taken place. The oldest and most beautiful portions are of finely-cut stone, each course having a height of 0·50 mètre; the stones are bossed, with a squared channel worked at the joints, and the voussoirs are single stones reaching quite to the bottom of the specus, in which there exist, at intervals all along its course, circular manholes, both to admit air and to permit the repair and cleansing of the channel.

A great part of the aqueduct, however, is built in a far less solid manner—of concrete blocks or rubble masonry. In some places, at the angles, or where danger threatened, rough and massive counterforts have been erected to strengthen it. Along the plain of the Oued Melian, in a length of nearly 3 kil., the author counted 344 arches still entire. Since then a number have been destroyed to metal a new military road which has never been completed!

The aqueduct passed the river on a double series of arches. These were all destroyed in order to make use of their foundations for the modern bridge which now carries the water across, and serves at the same time as a viaduct.

From this point to Carthage, along the plains of the Mohammedia, the Manouba, and Ariana, the ancient aqueduct is nearly ruined, and its stones have been used in the construction of Tunis (see also p. 315).

Leaving the Oued Melian, the road to Zaghouan follows the line of the aqueduct; but a detour to the east may be made to visit the ruins of Oudena, the ancient city of Uthina.

Between the aqueduct and Oudena may be seen a long line of megalithic monuments.

The traveller will be well rewarded by a visit to Oudena. The view from the site of the ancient Uthina commands a vast extent of country. On the N. is the bay of Tunis, the hill of Carthage, and the slopes of Djebel Ahmar; on the S. the rugged Djebel Ressas, connected by a range of lower hills with the towering Djebel Zaghouan; on the W. is the long broken line of the great aqueduct, in its stately march across the plain.

The present condition of the ruins proves it to have been a place of very considerable importance; they cover an area of several miles, and it must certainly have contained a very large population.

Pelissier imagines this to have been the Tricameron where Belisarius overcame Gzilmer, and where all the hoarded treasure of the Vandals and the piratical spoil of Genseric fell into the hands of the Byzantines.

The central and highest point in the city was crowned by a **Citadel** covering an area of about 60 mètres long and 30 wide. The entrance-gate was on the N.W. front, facing the amphitheatre. The walls were of great thickness and constructed of large blocks of cut stone.

The upper terrace was surrounded by a parapet; below were several chambers with strong vaulted roofs, still nearly entire. The largest of these measures

20 mètres long by 10 wide. The vaults are supported on square piers, with a very bold and massive cornice, each stone being 0·60 mètre in breadth, 0·76 in height, and 0·92 thick. On the northern side is a large arch 7 mètres in diameter, loosely filled up with squared stones. From the centre of this a passage about 0·92 mètre in width runs perpendicular to it, and after a distance of about 5 mètres the passage bifurcates to the right and left, and descends at an angle of 45° till it reaches a vast subterranean apartment, which encircles the whole building, and was no doubt intended to serve as a reservoir. The descent is very difficult, owing to the accumulation of *débris*; but the chamber appears to have been about 4 to 6 mètres high, and nearly as much in width, occupying three sides of a square, of which the passages before mentioned formed the fourth side.

To the N.W. of this building is a very perfect **Amphitheatre**, with an elliptical arena; the major axis is about 70 mètres in length, and the minor one 50. Four principal entrances led into it, and these, together with many of the upper arches, are still in a tolerably perfect condition. No doubt, in the construction of this, advantage was taken of a natural depression on the top of a mamelon in which it is sunk.

Behind this monument, towards the N., may be seen a small **Bridge** of three arches, spanning the bed of a watercourse.

To the S.W. of the citadel are the remains of a **Theatre**, and to the S.E. of it two very magnificent reservoirs, the northern one intended to contain rain water, but that to the S. was supplied from a well at some little distance, between which and the reservoir are the remains of a solidly constructed aqueduct.

Perhaps the most remarkable of the ruins is one due E. of the citadel; it must have been a building of immense size, but it is impossible from its present appearance to form any conjecture as to its original destination. The walls, which were built of rubble masonry, of great thickness, have been

rent asunder into huge masses, too large to have been moved by any mere mechanical power likely to have been employed, and yet they lie scattered about, without any apparent order, in every direction.

Underneath these is a series of reservoirs of immense height and size, separated by partitions, yet connected together by arched passages; access is gained by a very narrow hole in the side of one of them; the masonry throughout is quite perfect; not a trace is visible of any great convulsion of nature, which alone, one would think, could have effected the ruin of the superincumbent building.

Twenty minutes more takes the traveller from Oudena to the southern end of the plain spanned by the aqueduct, where is a domed building, from which the syphon of the modern aqueduct starts; this is 26 kil. from Tunis, and 33 from Zaghwan.

From this spot the road continues through an undulating country overgrown with brushwood. After a few kil. the ruins of a Roman post are passed, called by the Arabs Bab Khalid, the ancient name of which is unknown. At 47 kil. from Tunis is the spot called Magaran, where the two sources from Zaghwan and Djougar unite, and are conveyed in a single stream to Tunis, as they formerly were to Carthage.

The former source will be described hereafter; the latter, Ain Djougar, is situated 37 kil. farther to the W., close to the village of Bint Saïda, which occupies the site of the ancient Zuchara Civitas. Like the other, this one also issued from a monumental fountain, now in a very bad state of preservation, but when visited by Shaw the frieze of the building still existed, and bore the following inscription:—

..... RORISHI TOTIVSQVE DIVINAE DOMVS
EIVS CIVITAS ZVOCHARA FECIT ET DEDICAVIT.

At Magaran there is a very neat house, surrounded by a garden, occupied by the French employé in charge of the waterworks. About 6 kil. farther on, and 53 from Tunis, is the village of

Zaghwan, the ancient *Zeugis*, which gave its name to *Zeugitana*, or the province of Africa proper. The modern town occupies the same site as the ancient one, the crest of a spur proceeding from the north-east side of the mountain bearing the same name. The only ruin of any importance is the entrance-gate, called Bab el-Goose, which, no doubt, served the same purpose to the ancient city.

After the first destruction of Zaghwan it was rebuilt by a colony of Andalusian Moors from Spain; but, notwithstanding its exceptionally favourable position and the abundance of its water supply, it appears to be falling into decay; half the houses are ruined, and there is no appearance of any modern construction going on.

The principal industry of Zaghwan for many generations has been the dyeing of the red caps worn in all Mohammedan countries throughout the basin of the Mediterranean, and here called *chachias*. In Turkey such a cap is called *fez*, and in Egypt *tarboosh*. This is the only place in the Regency where the operation has ever been performed, and the secret is carefully preserved, and descends from father to son. A military post is established here, which is generally commanded by a captain.

The great interest of the place to the traveller is its vicinity to the springs from which the aqueduct is supplied; the distance is about 2½ kil., and there are two paths, one of which the traveller would do well to take in going and the other in returning, or he may go the whole way in a carriage. The first passes to the S. of the delicious valley which runs east and west behind the town, and close to the spring *Ain Ayat*, which is the cause of its fertility; the other follows its northern border between it and the hill on which the shrine of Sidi Hashlaf is built. This valley is richly cultivated, and produces great quantities of fruit trees; the waters of *Ain Ayat* are also used to turn a few flour-mills.

The great source, however, which flows into the aqueduct issues from a

spot a little farther on, where are situated the remains of a charming Roman temple, known to the natives by the name of El-Kasba, or the fortress.

The building is extremely elegant, and in its original condition must have been one of the most charming retreats which it is possible to imagine. It is situated at the gorge of a narrow and precipitous ravine descending from Djebel Zaghouan, but at a very considerable elevation above the plain at its foot.

It consists of a paved area of a semi-circular form, but with the two exterior limbs produced in straight lines as tangents. Round the perimeter was a raised colonnade, and at the end, in the middle of the circular portion, was a rectangular cella, which is still tolerably entire. The walls of this latter building are of rubble masonry, but at the extremity there is a niche lined with cut stone, surmounting what may either have been the base of a statue of an emperor or an altar to a divinity. Probably the former, as the mutilated trunk of such a statue, in white marble, and of colossal size, was actually lying on the ground outside at the time of the writer's visit; this has now disappeared. Above the door are the remains of a beautiful architrave, which doubtless was surmounted by a pediment. To the right and left of this proceeded a lateral gallery, 4 mètres broad. The posterior wall was of finely-cut stone, with thirteen square pilasters on each side, between every alternate pair of which a round-headed niche for statuary was sunk in the thickness of the wall. Towards the interior a Corinthian column corresponded to each of the pilasters, but these have long since been removed, and now decorate the interior of the principal mosque of Zaghouan. Each end of this colonnade was terminated by a handsome gateway; and from the lower surface of the area on either side a flight of fifteen steps conducted to a basin or nymphæum, shaped like a double horse-shoe; in this the spring rose, and was conducted into the aqueduct. The spring is no

longer visible, being led into the modern aqueduct before it emerges from the ground.

The colonnade was roofed by one general half-cylindrical vault in the direction of the length of the building, intersected by twelve other transversely directed cylindrical vaults rising from the pilasters in the walls and the columns in front. A cornice of a bold outline ran all round, serving as impost to the vaults and ornamental doorways, and as capitals to the pilasters. A great portion of the vaults supported by the walls still remain, to show the nature of the construction.

The rear of the wall was strengthened exteriorly by a coating of immense blocks of cut stone, to protect it from any rush of water which might flow from the ravine above, after heavy rain. There is also a communication from the colonnade to the exterior by means of a small square-headed door in the posterior wall.

The whole of this monument has now been enclosed within a wall to ensure its preservation, so that the traveller who may wish to visit it must apply to the office of the Company in Tunis for an order to enter; this should be delivered to the employé above-mentioned at Magaran.

A magnificent view is obtained by mounting the hill immediately south of the town, crossing the valley watered by the Ain Ayat; and a still finer one by climbing to the top of Djebel Zaghouan, which may easily be done by spending an extra day at this place.

A heliographic station has been established on the summit of Djebel Zaghouan, which commands an uninterrupted view of the country round in every direction as far as Susa, Kerouan, etc.

ROUTE 33.

**Voyage along the Coast of Tunis
to the Island of Djerba.**

Excellent steamers of the *Compagnie Transatlantique* and of the *Compagnie Générale Italienne* run from Tunis every week, visiting the principal ports on the coast as far as Tripoli, and thence crossing to Malta. The days and hours of sailing should be ascertained at Tunis.

Vessels pass between the Island of Zembra and Cape Bon, or Ras Adar, the Hermean promontory, beyond which the Carthaginians so often stipulated that no Roman ships should pass. This is the extreme eastern point of the Dakhul, or large tongue of land which extends in a N.E. direction between the Gulfs of Tunis and Hammamet. On this cape is a remarkably fine red intermittent light, which can be seen for a distance of 25 m.

At a distance of 58 m. from the Goletta, following the vessel's track, is **Kelebia**, a small and clean town, situated about a mile from the sea.

To the N. of the landing-place may still be traced the ruins of the ancient *Clypea*, founded by Agathocles in B.C. 310; the first position occupied by Regulus on his arrival in Africa B.C. 256, and, according to El-Bekri, the last city which remained in the possession of the Christians after the Mohammedan invasion.

This is dominated by a hill 270 feet high, called *Aspis* by Strabo, on account of its resemblance to a shield. The summit is crowned by the *Kasr Kelebia*, a fine Spanish fortress, the exterior walls of which are in good condition, though the interior is ruinous. In the centre may still be seen part of the Roman Acropolis, a keep of finely cut masonry surrounding a magnificent reservoir, the terraced roof of which is supported by nearly 100 monolithic pillars; its depth is about 8 mètres, and when the writer visited it at the end of the hot season it contained $2\frac{1}{2}$ mètres of water.

On the hill itself are two marabouts,

those of Sidi Ali Makadam and Sidi Khurfash, and on the point below, near the ruins of a battery, is a third, dedicated to Sidi Mustapha, which has given its name to the small bay, once a Roman harbour.

Farther along the coast is the village of **Menzel Temim**, to the N. of which is the *Oued Tefkhasid*, the river where Masinissa was defeated by Bocchar, about B.C. 204, and his escort cut to pieces.

At 30 m. from Kelebia is the town of **Neboul**, also about a mile from the beach, close to the now unimportant ruins of *Neapolis*, of which the modern name is simply an Arab corruption. The land around is very rich, and produces immense quantities of fruit and vegetables. The staple manufactures of the place are pottery and mats. The former is much sought after, and is really curious, owing to the quaint forms employed and the bright yellow and green colours of the glaze.

8 m. farther on is **Hammamet**, a small town of 3700 inhabitants, surrounded by a dilapidated wall and protected by a citadel, clearly of Arab construction. The land in the neighbourhood is well watered, though sandy, and the place once did a considerable trade in lemons, which were sent to Palermo for exportation to America. The modern town is not built on the site of any ancient city.

[Should the traveller decide on making the journey from Tunis to Susa by land, he can do so by carriage in two days, or by a diligence in one; but he should not do so for pleasure, as there are not sufficient objects of interest.

He can sleep at *Bir el-Bouïta*, nine hours from Tunis, where there is a large fondouk. 5 kil. farther on the road passes by a circular Roman edifice, called *Kasr-el-Menara*, Θ, built of fine blocks of cut stone; it is about 14 mètres in diameter, and $10\frac{1}{2}$ high, probably the tomb of some distinguished family. The cornice and

altars upon it, described by Shaw, have disappeared.

There are numerous vestiges of Roman houses near this monument.

The second day's journey lies through the famous property of the *Enfida*, which forms an immense rectangle contained between the towns of Hammamet, Susa, Kerouan, and Zaghouan.

Its entire superficies may be estimated at about 120,000 hectares, and it contains a population of nearly 7000 inhabitants.

This property had been granted by the Bey to Kheir-ed-din Pasha, then Prime Minister of Tunis, in consideration of his having obtained from the Sultan the confirmation of the right of succession to the Beylick by members of Sidi Es-Sadik's family.

In 1879, when Kheir-ed-din quitted Tunis for Constantinople he determined to sell all his property in the former country. Having tried in vain to induce his countrymen to become the purchasers, he disposed of it to the Société Franco-Africaine.

This was not pleasing to the *entourage* of the Bey, and an endeavour was made to invalidate the sale by the exercise of the Arab custom of *Chefäa*, or right of pre-emption. Several British subjects were concerned in this; but after much litigation and diplomatic action the domain remained in the hands of the original purchasers. Indeed, it may be said that this dispute was one of the principal causes which brought about the French protectorate.]

The vessel now takes a southern course, and after crossing the Gulf of Hammamet, a distance of 33 m., reaches

Susa, or, according to the modern French orthography *Sousse*.

Population—	
French . . .	1000
Italians . . .	2700
Maltese . . .	1070
Other Europeans . . .	60
Mohammedans . . .	7700
Jews . . .	1800
Total	14,330

This is now an important French military station, the camp being located outside the town, west of the citadel. It is admirably constructed and well planted with trees. A splendid *cercle militaire* has been built outside the walls.

It is the ancient Hadrumetum, capital of the province of Byzacium, mentioned by Sallust as having been a Phœnician colony more ancient than Carthage. Trajan made it a Roman colony. It is often mentioned in the Punic and civil wars, and, like many other cities, it was destroyed by the Vandals and restored by Justinian.

After Okba had built the city of Kerouan he remained at Susa during a considerable period. Subsequently, when the Turks took up the profitable trade of piracy, this became one of their favourite haunts, whence they made predatory excursions to the coasts of Italy.

In 1537 Charles V. sent a naval expedition from Sicily against the place, which refused to submit to his *protégé* Mulai Hassan. The command was given to the Marquis of Terra Nova, but after a vigorous assault he was obliged to retire and leave victory in the hands of his enemies. In 1539 another expedition was sent, commanded by Andrea Doria, with better success; but no sooner had he left than it revolted again, and welcomed the celebrated pirate Dragut within its walls.

In all the frequent dissensions between the Arabs and Turks the importance of Susa as a strategic post was so great that its possession was generally the key to supreme power. The town is situated on a gentle slope rising from the sea, and presents a most picturesque appearance from a vessel in the harbour. It is surrounded by a crenellated wall, strengthened at intervals by square towers and bastions. In the interior these walls have arched recesses, which serve as shops and storehouses. At the summit is the Kasba, which has been thoroughly restored by the French, and now contains the residence of the colonel commanding.

The view from the terrace is very fine, and the gates, especially that of the Kasba, are quaintly decorated in disemper. Four gates used to give entrance to the town, the Bab el-Bahr or Sea Gate, Bab el-Gharbi or Western Gate, and Bab el-Jidid or New Gate, constructed about forty years ago. Two more have been opened since—one to the W. and the other to the N. of the town; the latter is called *Bab el-Drouj*, or Gate of the Steps. Great changes have taken place since the French occupation; some of the old walls have been thrown down, boulevards and new streets have been opened out. A French Tribunal has been established for the entire south of the Regency, various public edifices have been built, and excellent water has been introduced from the *Oued Laia*, 15 kil. to the W.

The modern port is simply an open roadstead, very slightly protected by a curve in the coast towards the N., where was the ancient harbour, between the Quarantine Fort and Ras el-Bordj. The remains of the Roman breakwater may still be seen. But the accumulation of sand has rendered the water too shallow to permit vessels to make use of it. A great part of the ancient harbour is, in fact, now dry land. Some land has recently been recovered from the sea; on the S. side the battery has been transformed into a house for the captain of the port.

The principal objects of interest in the town are:—

The *Kasr er-Ribat*, a square building flanked by seven round bastions, with a high tower built on a square base. It was erected by the third prince of the Aghlabite dynasty, Ziadet Ullah, in A.D. 827, as a convent for *Merabetin* or devotees. El-Bekri mentions it under the name of Mahres er-Ribat.

There is also a curious coffee-shop, called by the Arabs *Kahwat el-Koubba*, or Café of the Dome. It is a small building, square in plan up to about 8 feet from the ground, thence rising cylindrically for about the same distance, the whole surmounted by a

curious fluted dome. The cylindrical portion has four large and four smaller arched niches, with very bold cornices, springing from semicircular pilasters between them. The walls are, however, so thickly encrusted with whitewash, that the architectural details are considerably obscured. A good view of the exterior of the building is obtained by mounting to the top of the *Morestan*, or public hospital, just opposite: the dome is decorated exteriorly by a ridge and furrow fluting, converging at the apex.

There is also a curious old building, either of Roman or Byzantine construction, now used as an oil mill. It consists of a central dome, supported on four arches, three of which give access to narrow chambers, the entrance being in the fourth; beyond the left-hand chamber, on entering, are two parallel vaulted apartments, extending the whole length of the building. The piers of the arches have originally been ornamented with columns, and the ceiling appears to have been decorated with tiles or mosaics.

In the *Bab el-Gharbi*, or Western Gate, a marble sarcophagus has been built into the wall, and now serves as a drinking fountain. The inscription is given by Guérin, but at the present day it is quite illegible.

About half a mile outside the gate is the ancient Roman Necropolis.

A very considerable part of the trade is in the hands of Maltese, who are here, as everywhere else in North Africa, the most industrious and frugal, and about the best-behaved class of the population. They almost monopolise the carrying trade, with their *karatonis*, or light carts on two wheels, to which one good serviceable horse or mule is usually harnessed. They also keep horses and carriages for hire at all the principal towns, which are unusually well supplied in this respect. The march of events has forced the Tunisians to abate their intolerance, but people are still alive who remember the time when driving in a carriage with four wheels was the exclusive privilege of the Bey, all

others, consuls included, being forced to content themselves with two-wheeled vehicles.

A good road has been constructed from this place to Tunis and Mehedia, and soon the railway will supersede even these.

[**EXCURSION TO EL-DJEM.** This can be done in two days; the writer paid 90 piastres (£2:5s.) for the hire of a carriage. There is a fondouk near the amphitheatre, now turned into a school where the traveller can lodge in tolerable comfort. He must, however, take everything he requires with him, including water for drinking purposes.

The road passes for many miles through olive groves of great extent. S. of the village of *Zaouiet-Susa* are the ruins of a Roman fort, Θ , and beyond, the remains of several cisterns. The views are fine.

The wayside fountain at Menzel is the only water on the road. Beyond this the olive trees cease, and the traveller enters a wide and treeless plain, part of the district called *Es-Sahel*, or coast region—extremely fertile when an unusual quantity of rain has fallen, but at other times almost uncultivated, and apparently hardly susceptible of cultivation.

There is little of interest at El-Djem, save its amphitheatre, which may be said to be all that remains to mark the site of the ancient city of *Thysdrus*, or *Thysdritana Colonia*. The modern village is built entirely from its ruins, and all that is visible of the city itself are a few foundations and tombs towards the N.W.

It is first mentioned in history by *Hirtius*. After the defeat of *Scipio* at *Thapsus* it submitted to *Cæsar*, who condemned it to a fine of corn, proportionate to its small importance. It is also mentioned by *Pliny*, by *Ptolemy*, and in the tables of *Peutingering*. It was here that the proconsul *Gordian* first set up the standard of rebellion against *Maximin*, and was proclaimed Emperor in A.D. 238, in his eightieth year. He did not long live to enjoy his exalted

dignity; he was defeated in battle by *Capellianus*, procurator of *Numidia*; his son was slain, and he perished by his own hands after having worn the purple for less than two months.

The solidity of the masonry and the vast size of this building have induced the Arabs at various periods of their history to convert it into a fortress; it has frequently been besieged, and on each occasion, no doubt, to the great destruction of the fabric. The first instance on record is during the wars of the early Arab conquerors. After *El-Kahina* had defeated *Hassan ibn Naâman*, and driven him as far as *Tripoli*, the latter received considerable reinforcements from *Egypt*, and again set out for the conquest of *Ifrikia*, about 698. *El-Kahina* entrenched herself in the amphitheatre, where she sustained a long siege before being compelled to evacuate it. The name of *Kasr el-Kahina*—the palace, or fortress, of the sorceress—attached itself to the building for many ages after this event.

This edifice offers the same exterior divisions as the principal monuments of a similar kind built elsewhere by the Romans, three outside open galleries, or arcades, rising one above another, crowned by a fourth story with windows. But at *El-Djem* the architect seems to have tried to surpass, in some respects, the magnificence of existing structures. In the Coliseum at *Rome* the lower story is decorated with a *Doric* half-engaged order, the second with an *Ionic*, and the third with a *Corinthian*. The fourth story was pierced by windows like this one, but pilasters alone are employed, so that the general aspect is that of three stories, gradually increasing in magnificence as they rise, crowned by a high attic, which supported the masts destined to receive the ropes of the velum. In many other amphitheatres the *Doric* order is alone employed. But here, at *El-Djem*, the orders of the first and third galleries are *Corinthian*; the middle one is composite; the fourth was probably *Corinthian* also, if it ever was completed.

The windows of the fourth story of the Coliseum are square-headed, as was generally the case in monuments of this kind; but at El-Djem the heads of the windows are neither straight nor semicircular, but segmental, and they are built as true arches, with voussoirs. They are placed at every third interpilaster.

Each of the three lower stories possessed sixty-four columns and arches, and at each extremity was a grand entrance, but the west one is included in the breach made by Mohammed Bey in 1697, to prevent the building being again used as a fortress. Since then the work of destruction has gone on rapidly, and now fully one-third of the whole perimeter is destroyed.

The interior of the amphitheatre has suffered much more than the exterior, doubtless from the fact that it has so often served as a fortress, and partly from the material having been taken to block up the lower galleries and to build the modern village.

There are many indications of this great monument never having been completed. The attic story, which was necessary to support the velum, was commenced on the inner wall of the external gallery, but not apparently on the outer wall. Some of the ornamental details also are in an unfinished condition. The keystones of the arches of the lowest order were probably all intended to be sculptured, but they are still in their original rough condition, with the exception of two, one of which bears the head of a human being, and the other that of a lion.

The outside gallery on the ground floor, where most perfect, has been utilised by the Arabs as storerooms for their corn and forage; some of the arches are converted into shops, and there is evidence that the upper galleries also have at some time or other been converted into dwellings, holes in the masonry for the reception of joists being visible in every direction.

Several inscriptions have been found here; the most important has been preserved in the enclosure of the Chapel of St. Louis at Carthage, and has been often quoted: the name of the town

is twice mentioned in it—once as Thysdrus, and again as Thysdritana Colonia.

A number of rude Arabic or Cufic inscriptions, accompanied by representations of swords and daggers, have been scratched on the exterior wall above the principal entrance, and one, which is certainly of Berber origin, may date from the era of El-Kahina.

The stone of which the amphitheatre is built was obtained from Salletta on the sea-coast: the Salletti of the tables of Peutinger, and the Syllectum of Procopius, the first resting-place of Belisarius in his march from Caput Vada to Carthage. The natives assured the author that between this place and El-Djem the remains of the ancient paved road can easily be traced. The stone itself is of the youngest geological formation, belonging to the raised coast-beaches found at from 60 to 180 mètres above the present level of the Mediterranean. It is a somewhat fine-grained marine shell-limestone, with an admixture of siliceous sand full of fossil shells. Such a material is worked with the utmost facility; indeed, it may be cut with an axe, but it is not susceptible of being dressed with the same precision as more compact stone. The consequence is that the masonry is far inferior to the finest specimens of Roman work in Africa. Mortar has been plentifully used between the joints, and the stones are neither as large nor as closely fitted as usual; the average dimensions are—length 0·96 mètré, and height of courses 0·51 mètré.

Another feature of the construction of this building, never seen in others of the best period of Roman art, is the manner in which the appearance of nearly all the stones has been spoilt by triangular *lewis holes* being cut in their *exterior* faces, for the purpose of raising them into position. This gives the masonry a very slovenly appearance.

The town of Thysdrus, on the S. of the amphitheatre, the site of which is clearly visible from the upper walls of the structure, remains to be unearthed. Judging from the position of the Arab

village, it is probable that the walls of the old town will be found from 3 to 4·50 mètres below the present surface. Fragments of marble and pottery are seen everywhere.

The traveller can make a short excursion from El-Djem to the ruins of ROUGA, Θ, known as **Caraga**, or can take the carriage road to *Ksour-es-Sif*, 29 kil., walk to *Sallecta*, where are some interesting catacombs, and then drive to *Mahadia*, 12 kil. farther, whence he can take the steamer either to *Sfax* or *Susa*. *Susa* is the best place from which to make an excursion to **Kerouan**. The journey from *Kerouan* to *El-Djem* can be made by carriage in about ten hours; thence to *Mehedia* in five hours more.]

12 m. farther on is **Monastir** (pop. 5970), the *Ruspina* of the Romans, and the *Misteer* of the Arabs. It is situated on a promontory, with a few small islands lying off it, which affords some shelter from the N.W. winds. A quay and custom-house have been built by the French. To the S.E. is an extensive spit of shallow and dry banks, extending 10 m. from the coast, at the extremity of which are the *Kuriat* islands, where is a lighthouse. To the N. of the landing-place is an Arab fort, the *Borj el-Kebir*, and a country house belonging to the family of the late *Si Osman* of *Tunis*, a Greek renegade. The three islands off the point are *Djezirat el-Hammam*, *El-Ghadamsi* or the *Tonnara*, and *El-Oustani*. A French and Italian company have set up the old fishery; 7500 tunnies were captured in 1893.

The town is about a mile from the shore, connected with it by a good carriage road; it is of the usual Tunisian type, surrounded by a crenelated wall, strengthened by a citadel, which *Guérin* believes to have given its name to the place. *El-Bekri* mentions the fact that it contained lodgings for a number of holy men who had quitted their families to seclude themselves from the world.

-*En-Nasri* calls it "the best of sepulchres and the worst of habita-

tions," in allusion to the tombs of *Imam ibn Yunus* and *El-Mazeri*, learned Mohammedan doctors, which it contains.

The country around is extremely fertile, and contains fine olive groves, the principal wealth of the district. Date trees commence to be seen here, and ripen their fruit, which they do not farther N.

After leaving *Monastir* the steamer rounds *Ras Dimas*, the ancient *Thapsus*, celebrated for the decisive victory which *Cæsar* won under its walls against *Scipio* and *Juba I.*, and anchors at

Mehedia, 31 m. from *Monastir*. Pop. 8500.

This is the site of *Turris Hannibalis*, or country seat of *Hannibal*, whence he is said to have embarked after his flight from *Carthage*. The modern city, at one time the seaport of *Kerouan*, was built in 912 by *Obeidulla el-Mehedi*, a descendant of *Ali*, *Khalifa* of the West, whence its name. It is frequently called *Africa* in ancient chronicles. This place is interesting to Englishmen as being the scene of the very first expedition against North Africa in which we took a part. It is thus described by *Froissart* and *Holinshed* :—

"In the thirteenth year of the reign of *Richard II.* [1390] the Christians took in hand a journey against the *Saracens* of *Barbary*, through the suit of the *Genoese*, so that there went a great number of lords, knights, and gentlemen of *France* and *England*, the *Duke of Bourbon* being their general. Out of *England* there went *John de Beaufort*, bastard son to the *Duke of Lancaster*, also *Sir John Russell*, *Sir John Butler*, *Sir John Harcourt*, and others. They set forward in the latter end of the thirteenth year of the king's reign and came to *Genoa*, where they remained not very long, but that the galleys and other vessels of the *Genoese* were ready to pass them over into *Barbary*, and so about midsummer in the beginning of the fourteenth year of the king's reign, the whole army being embarked, sailed forth to the coast of

Barbary, where, near to the city of Africa, they landed, at which instant the English archers stood all the company in good stead with their long bows, beating back the enemy from the shore, which came down to resist their landing. After they had got to land they environed the city of Africa, called by the Moors Mehedia, with a strong siege, but at length, constrained by the intemperancy of the scalding air in that hot country, breeding in the army sundry diseases, they fell to a composition on certain articles to be performed in behalf of the Saracens, and so, sixty-one days after their arrival, they returned home."

Mehedia is situated on a narrow promontory extending about a mile to the E.; it has anchorage to the N. and S. sides according to the direction of the wind, but it is entirely exposed to the E. The southern side is that generally used, and a small harbour has been made there, which shelters coasting craft in all weather. This place has risen from its ruins in a remarkable manner since the French occupation; the old and dilapidated ramparts have been pulled down, and their material used for the breakwater of the harbour; so that now the town is thoroughly ventilated from every direction. The Arab quarter, on the N. of the promontory, remains untouched, but a new one, containing many important buildings, including barracks for the French troops, is springing up to the S. W.

At the extreme E. of the cape is the old Spanish citadel. This was recently a mere ruin, now it has been thoroughly repaired. It rose within the fortified position which occupied the entire eastern part of the promontory, and was admirably chosen both for defence and on sanitary conditions, being surrounded by the sea on three sides. Under its walls is an ancient *Cothon* or harbour, in a perfect state of preservation. It is a rectangle excavated out of the rock, about 147 mètres long by 73 broad, with an opening to the sea of about 13, once no doubt secured by a chain. This was very probably of Phœnician origin,

but the retaining walls show signs of reconstruction, in which old Roman columns and stones have been used.

A large number of Phœnician tombs may be visited both to the N. and S. of the town.

Leaving Mehedia the steamer passes **Salekta**, the *Syllectum* of Procopius, the first stage of the march made by Belisarius from Caput Vada to Carthage.

The landing-place of the Byzantine army was at the modern **Kapoudiah**, or **Ras Khadidja**, a low rocky point 11 m. farther to the S. E., on which is built a remarkable tower nearly 49 mètres high.

The voyager, however, will see nothing of this coast, as the vessel has to give a wide berth to the extensive banks which surround the **Kerkena Islands**, the *Circinæ Insulæ* of the Romans. The principal ones are *Cherka* to the E., *Ramleh* in the middle, and *Gharba* to the W. They are low, and covered with date and olive trees. Cereals are grown in some places, but the inhabitants, of whom there are about 3000, live to a great extent on the produce of the sea, and by making mats and baskets.

The dangers of these islands have been to some extent mitigated by luminous buoys, which are placed outside the shoals, and thus permit vessels to skirt them closely, and so make a safe passage round them.

Sfax is 116 m. from Mehedia. This is the ancient *Taphroua*, and the most important city in the regency, after Tunis. The modern name is said to be derived from the Arabic word for a cucumber. It has a population of 45,000, of whom 2900 are Europeans, and of the latter 1350 are Maltese.

The anchorage is at least 2 m. from the shore, and there is a rise and fall of 6 feet in the tide at springs; at Gages the rise is 8 feet. The lesser Syrtis is almost the only place in the Mediterranean where there is any tide at all.

Sfax may be said to consist of three

distinct portions. The European town to the S., along the seashore, in which many important improvements are being carried out by the municipality, such as roads, piers, etc.; then comes the Arab quarter, surrounded by a picturesque wall flanked by towers, some round and others square; and beyond this again the French military camp.

The distinctive feature of Sfax is the suburb, consisting of gardens and country houses, which extends for 6 or 8 kil. to the N. and W. Nearly every family has an orchard or garden, with a little house in it, where the owner passes at least the summer, frequently the entire year, riding to town and out again every day from his work.

The Government is doing all in its power to encourage the cultivation of olive and almond trees. About 30,000 hectares have been conceded for that purpose, which promises a plantation of 500,000 trees.

One of the most interesting sights of the place is the series of several hundred bottle-shaped reservoirs for collecting rain-water, within a walled enclosure almost as large as the Arab town itself.

This is the only place on the coast where there was anything like a serious resistance to the French.

By the end of May 1881 the whole country was in a state of revolution; and the fanaticism of the people of Sfax was thoroughly excited against Christians in general, but against the French in particular, who, however, had fewer representatives amongst the European colony than any other nation.

About the 25th of the month the Bey proposed to man the forts with Tunisian soldiers. This excited the suspicion of the populace, who, on the 28th, broke out and proclaimed a *Jihad*, or holy war. Almost all the Europeans went on board French men-of-war, or other vessels in the roads. The ironclad *Alma*, and the postal-steamer *Manoubia*, arrived on the 29th with 1500 Tunisian soldiers, but it was found inexpedient to land

them. In the evening H.M.S. *Monarch* and *Condor* arrived, to the great satisfaction of the British community.

On the afternoon of the 5th July the bombardment commenced by the French gunboats and two ironclads; the Sfaxiots returned the fire as best they could, but entirely without effect; desultory firing continued for more than a week. On the 14th of July more French vessels arrived, and there was now a squadron of four gunboats and nine ironclads. On the 15th the bombardment commenced in earnest; on the 16th the boats were sent on shore, under cover of the ships' guns, and a landing was effected, though not without some loss; the Kasha was occupied by 8 A.M. By the middle of August the town had resumed its usual quietness. The town had to pay a war indemnity of £250,000, and an international commission was formed to recompense Europeans for the losses they had sustained. The Arabs of the town soon returned to their occupations, but the Bedouins fled to Tripoli, leaving the whole of the southern portion of the Regency nearly depopulated. They did not return for several years.

This is one of the centres of the sponge trade.

After leaving Sfax, the steamer touches at **Gabes**, the ancient *Tacape*.

Before the French Protectorate only one solitary building existed at the landing-place of Gabes, but now this has become an important military station; barracks for a large number of troops have been built; about 200 houses have sprung up; a pier upwards of 200 metres long has been constructed, and an abundant supply of water has been brought in two streams from a distance of 5 miles.

Gabes can hardly be called a town, like the other principal places on the coast, but rather an assemblage of villages scattered through a beautiful oasis of palm trees.

The most important are *Djara* and *Menzel*, purely Arab towns, of no particular interest; the houses appear to be constructed, to a great extent, with the cut stone and broken columns of

the ancient Tacape. Before the French occupation they were at constant feud with each other, and a fort had to be built between them to keep both in awe of the Tunisian authority. The population is said to be 18,000, of whom 460 are Europeans, and of these latter 200 are Maltese. The number of date-palms is 400,000. A considerable trade is carried on in dates.

It is impossible, within the limits of such a work as this, to go into full details regarding the daring scheme of the late Commandant Roudaire, for the creation of an inland sea, by the submersion of the Sahara. Still it is hardly possible, when speaking of Gabes, to pass it over in silence. The project was conceived before the French Protectorate, but it is not in the least probable that it will ever be carried out, now that its originator is no more.

Between a place 70 kil. S. of Biskra and the sea exists an immense depression, 375 kil. long, occupied by three *chotts* or salt lakes, all of which are below the level of the sea. The isthmuses which separate them are of varying heights, but both considerably above the sea level. The whole of this area is separated from the sea by a third isthmus, also considerably above the Mediterranean.

Some geographers assert that this depression is the site of the ancient lake of *Triton*, that it communicated with the sea down to a very recent period, and that partly by the upheaval of its bottom, and partly owing to the difference between the quantity of water which entered and the amount of evaporation and absorption, the sea gradually disappeared, leaving the existing *chotts* the only evidence of the former condition of things.

Others maintain that there never was an inland sea here at all, and that the Tunisian *chotts* have the same origin as the more elevated *Sebkh*as of Algeria, the salt therein existing entirely from the washing of the higher ground by rain, which has no means of exit except by evaporation.

The quantity of water necessary to flood this depressed area would be 193

milliards of cubic mètres. M. Roudaire proposed to cut through the narrowest portion of the inland isthmuses, thus leaving the three basins prepared to receive the waters of the Mediterranean. He then intended to cut a canal between it and the sea, about 15 kil. N. of Gabes, at a place where the work would be facilitated by the presence of another small *chott*, and by the depression through which the *Oued el-Melah* flows into the sea.

There is no reason to imagine that at the present day there can be any insuperable difficulties in carrying out such a project, except that of obtaining the necessary amount of capital; but it is difficult to conceive any appreciable advantages as likely to result from it. There might perhaps be some slight modification of climate, though the area which this sea would occupy would hardly be larger in proportion to the rest of the Sahara than a single spot on the traditional panther's skin. Ships also might be able to circulate, but in a region which produces nothing save dates; and many groves of these invaluable trees would certainly be sacrificed to produce a very doubtful benefit to humanity.

The company which was got up for the creation of an inland sea received important concessions from the Tunisian Government, authorising it to create a port at *Oued el-Melah*, and to sink a number of artesian wells. Four have already been finished; it is delightful to witness the column of water thrown up into the air, equal to 10,000 tons a day, a quantity sufficient to redeem 600 hectares of land from sterility, and irrigate 60,000 palm trees. This is the true solution of the story of an inland sea, a sea of verdure and fertility, caused by the multiplication of artesian wells, which never fail to bring riches and prosperity in their train.

About 30,000 olive trees have been planted by the Company; yet, notwithstanding the abundance of water, it does not seem to prosper. It is apparently working with insufficient capital.

After leaving Gabes the steamer crosses the *Syrtis Minor* and anchors off Djerba, immortalised by Homer as the "Island of the Lotophagi." The distance is 36 m., but the sea is so shallow that vessels cannot approach nearer than 4 m. At that distance a light vessel has been stationed by the *Compagnie Transatlantique*, and passengers must look well after the tide, as at dead low water the smallest boat cannot approach the shore. The rise and fall is 7 feet. A lighthouse is being built on the N.E. corner of the island.

The population of the island is about 35,000, of whom 360 are Europeans, and 300 of these are Maltese. There is a large Jewish community, who inhabit two separate villages, *Harat el-Kebira*, close to the capital, and *Harat es-Sogheira*, nearer the centre of the island. The Mohammedans are to a great extent of Berber origin, and some of them are Wahabite, professing the tenets of the Beni M'zab in Algeria.

Djerba is mentioned by many ancient writers. Herodotus and Eratosthenes call it the *Island of the Lotophagi*; Strabo and Pliny, *Meninx*; Scylax, *Brachion*; Aurelius Victor (3rd century) mentioning the fact of two Emperors, Gallius and Volusianus, having been raised to the purple here, gives both the second of these and that used at the present day, *Creati in insula Meninge quæ nunc Girba dicitur*.

Much controversy has arisen regarding the lotus of the *Odyssey*. "Now whosoever did eat the honey-sweet fruit of the lotus had no more wish to bring tidings nor to come back, but there he chose to abide with the lotus-eating men, ever feeding on the lotus, and forgetful of his homeward way." Most writers have been content to follow Shaw, who identifies it as the *Seedra* of the Arabs, or the *Ziziphus lotus* of botanists, a fruit which in its wild state is hardly eatable, and even when cultivated is quite unworthy of immortality, a fruit moreover which does not exist upon the island at all. It seems unnecessary to go out of one's way to search for the Homeric food,

the island is covered with it, no greater blessing than it was ever bestowed by Providence on man, and no other fruit is so all-sufficient for human sustenance as the "honey-sweet" lotus of the ancients, the DATE of the modern Arab.

The ordinary landing-place at Djerba is on the N. side of the island, close to the modern capital *Houmt es-Souk*; a good pier has been built, and a carriage road made to the town. Close to the former is the old fort, *Borj Kebir*, the scene of many sanguinary struggles between Christians and Mohammedans. Near it was the celebrated *Borj er-roos*, or pyramid of skulls, which was seen and described by Sir Grenville Temple in 1832. It was 20 feet high, and 10 feet broad at the base, tapering towards a point, and composed entirely of skulls resting in regular rows on intervening layers of the bones appertaining to the bodies. These, no doubt, were the remains of the unfortunate Spanish garrison commanded by Don Antonio d'Alvaro, who were overpowered and exterminated by the Turks in 1560. The Viceroy of Sicily and Andrea Doria were of the number, but they managed to effect their escape in a small boat. In 1848, at the instance of the Christian community of Djerba, supported by the consuls at Tunis, this monument was pulled down, and the bones interred in the Catholic cemetery close by.

The principal villages in Djerba are *Houmt es-Souk*—the capital, *Midoun*, and *Cedrien*, 13 and 16 kil. to the S.E. of it. *Houmt Ajim*, on the S.W. coast, *Gallala* to the S., celebrated for its pottery, and *Cedouikah*, on the way from the capital to El-Kantara. The island is very flat, the highest point being only 36 mètres above the sea. The soil is sandy but fertile, covered in every direction with olive and date trees; the former are particularly fine, and fruit of various kinds is cultivated in enclosed gardens round all the villages. A considerable trade is done in sponges, which are fished up by Maltese and Greeks; the former use iron grains, the latter frequently employ a diver's dress. The principal manu-

factures are bornbuses and coloured blankets, which are in great request in North Africa.

The most remarkable feature of Djerba is the great bight or inland sea which separates it from the mainland. This forms a large lake of irregular shape, the greatest length being 17 kil., and the greatest breadth 13 kil. It communicates with the Syrtis Minor to the W., by means of a narrow strait, 2½ kil. broad, and with the sea to the E. by a longer and broader one, the narrowest part of which is 3 kil. The channels in these are narrow and rather intricate, but both they and the lake itself are perfectly navigable for vessels of about 200 tons burden.

At *El-Kantara*, about the middle of the larger strait, are the ruins of what must have been a magnificent city, probably *Meninx*, certainly the most important place on the island. Although this was accessible to trading vessels in ancient times, the water was still sufficiently shallow to admit of a causeway being built to the W. of it, connecting the island with the mainland; this probably had an opening to permit the passage of vessels. Even now it is possible to cross at low tide over what is called the *Tarik El-Djemil*, or "road of the camel."

In the middle of the eastern strait is a fort called *Borj Castille*, connected with the shore by a long sandy spit. This is said to have been built by the Aragonese of Sicily in 1289.

The ruins of *El-Kantara* have not been sufficiently explored; some fine things have been found, and immediately carried away, but enough remains to show that *Meninx* must have been a place of unusual magnificence. This may be judged by the wealth of richly-coloured marbles employed, capitals, shafts, vases, sculptured stones of immense size, broken sarcophagi, etc., of the richest varieties of coloured marbles and breccias, all of Greek origin. These testify to the riches and importance of the place, and to the extent of its foreign commerce.

Other important Roman remains exist. *Bou-Ghara*, ancient *Gightis*, to the S.W. of the lake, and indeed

everywhere on that part of the mainland as far as *Zarzis*, the last port on the Tunisian coast. In the map which has been issued by the *Dépôt de la Guerre*, upwards of fifty places are marked with the letters R.R., indicating the existence of Roman ruins. They prove beyond all doubt that this small inland sea was at one time a place of considerable importance, a haven of safety, and perfectly navigable for the vessels then in use. It answers in all material points to the description which *Scylax*, at least, gives of *Lake Triton*, and there can be little doubt that it is here, and not in the region of the chotts, that we must look for the position of that famous lake.

Zarzis is very little frequented except by sponge fishers. There is, however, a small garrison here as well as at *Tatahouine* and *Biban* to protect the frontier. The anchorage is protected by a natural breakwater like that at *Mehedia*. The salubrity of its climate and the presence of sweet water, not less than its geographical situation, make it a better station than *Gabes* for the troops intended to protect the south part of the Regency.

ROUTE 34.

Susa to Kerouan.

The easiest way of visiting Kerouan is by carriage or horse tramway from *Susa*; the journey can be done in six hours, and the traveller will find fairly good accommodation in its two hotels.

The journey is over a desolate and uninteresting plain, to the north of the *Sebkha* of *Sidi el-Hani*.

Next to *Mecca* and *Medina* no city was, till the French occupation, so sacred in the eyes of Western Mohammedans. It was founded by *Okba ibn Nafa* in the fiftieth year of the *Hejira* (A.D. 670). He proposed to his troops to found a city which might serve him as a camp, and be a rallying

point for Islamism till the end of time. He conducted them to where Kerouan now is, and which was then infested with wild beasts and noxious reptiles. Ibn-Khaldoun states that he collected around him the eighteen companions of the Prophet who were in his army, and called out in a loud voice, "Serpents and savage beasts, we are the companions of the blessed prophet, retire! for we intend to establish ourselves here." Whereupon they all retired peaceably, and at the sight of the miracle many of the Berbers were converted to Islamism. Okba then planted his lance in the ground and called out—"Here is your **Kerouan!**" (caravanseraï or resting-place) thus giving the name to the new city. He himself traced out the foundations of the Governor's Palace and the great mosque; the true position of the *Kiblah*, or direction of Mecca, is believed by Mohammedans to have been miraculously communicated to him by God.

Before the French Protectorate no Christian could enter its walls without a special order from the Bey, and a Jew did not dare even to approach it. The sacred character of the city, however, did not exempt it from its full share of war and violence. Even the great mosque has more than once been almost totally destroyed by the Mohammedans themselves, though it was never absolutely polluted by a Christian invader.

When Tunis was occupied by the French, formidable preparations were made for the attack of the Holy City, where a desperate resistance was anticipated, and the occupation of which was considered the only means of controlling the fanaticism of the Tunisians. Three Corps d'Armée were ordered to arrive at once under its walls. The first sent from Tunis, taking the route by Zaghouan, was commanded by General Logérot, under the superior orders of General Saussier. The second started from Tebessa, commanded by General Forgémol, and was composed of soldiers from Algeria and Arab *Goums*. The third, under General Etienne, marched from Susa. The

last-named found the gates open to him, and entered the city without opposition. Not a blow was struck. The Governor voluntarily surrendered the town, the French force defiled through it and encamped under the walls, one regiment having occupied the citadel.

This is the only place in the Regency of Tunis where Christians are permitted to visit the mosques and religious edifices. The first Englishman who ever visited them was Mr. A. M. Broadley, who has given the best description yet published,¹ and of which we have liberally availed ourselves.

Kerouan is of an irregular oblong figure, surrounded by a crenelated brick wall, strengthened by towers and bastions, and pierced by five principal gates, and four posterns, now closed. The chief suburbs are to the south and west; they contain several important shrines and three great cisterns. The largest of these is generally attributed to the Aghlabite dynasty, who ruled towards the close of the 8th century. It consists of three portions—a large polygonal reservoir of 64 sides, containing 5800 cubic mètres of water; a smaller one above, with 17 sides, and a capacity of 4000 cubic mètres, intended to receive any *débris* that may be washed down by the stream and allow only the clear water to flow into the main receptacle; and lastly, two reservoirs lower down, containing each 450 mètres, from which the inhabitants of the city may draw water. This has been restored by the French in connection with the works for supplying the city with water from the springs of Cherchira. There are two other reservoirs, but in a ruinous condition.

The aspect of the city has greatly changed since the French occupation. A French school has been built; the streets have been paved, and the roads have been planted with trees.

The names of the gates are *Bab el-Tunis*, Tunis Gate; *Bab el-Kharouk*,

¹ *The Last Punic War—Tunis Past and Present*, 1882.

Gate of the Peach; *Bab el-Djelladin*, Tanners' Gate; *Bab el-Kasba*, Gate of the Fort; and the *Bab el-Jiddid*, or New Gate.

The **Great Mosque** of Sidi Okba is the principal object of attraction, and occupies nearly all the northern angle of the town. It consists of a rectangle divided off into three parts—1st, the *Maksoura*, or prayer chamber, exclusively reserved for worship; 2nd, the vestibule adjoining it; and 3rd, a great cloistered court, from which rises the minaret. The effect on entering the *maksoura* is very grand. It forms a rectangle consisting of 17 naves, each of 8 arches, supported by coupled marble and porphyry columns, the spoil of the chief Roman edifices in North Africa. There are 296 in this portion of the building, and 439 in the entire mosque. The capitals are of every style of Roman architecture, and some have a distinctly Christian character, the majority belonging to the Composite order—a combination of the Ionic and Corinthian. The central nave is wider than the others, and the columns there are arranged three and three. It leads from the *Bab el-Behou* or "Beautiful Gate" to the *Mihrab* or *sacrarium*. The former is of beautifully sculptured wood, with a long inscription in relief, containing an extract from the Koran and the record of its construction. The latter has the archivolt supported by two columns of alabaster sent by one of the Byzantine emperors to Hassan ibn Naaman in A.D. 689. The walls are of exquisitely painted plaster work, through the openings of which the original *mihrab* of Sidi Okba can still be seen when it is lighted up.

To the right of this is the *mimbar* or pulpit, 6 mètres high, of splendidly carved wood, every panel being of different design; and near it is an enclosure of the same kind of work, called the *Beit el-Edda*, giving access to several chambers, the room of the Imam, and what ought to be the library. It bears a long cufic inscription in a single line, recording its construction by Abou Temim el-Moez

[*Alaeria*]

ibn Badis, one of the Sanhaja Emirs, whose reign commenced in A.D. 1015.

The shafts of the columns which support the dome are of porphyry, and measure about 12·6 mètres in height. This great chamber is dimly but effectively lighted by coloured glass in the dome.

The court is surrounded by a double arcade with coupled columns, and under it is an immense cistern occupying the entire area. On the north-west side, facing the *Bab el-Behou*, rises the minaret or *minar*, as it is called, a high quadrangular tower of three stories, each decreasing in height and breadth. Several pieces of Roman sculpture and inscriptions are built into the base, and the steps are mostly of slabs of marble from Roman buildings. A very fine view is obtained from the summit.

The most striking peculiarity of the mosque is the grand simplicity and cathedral-like aspect of the interior. There is nothing little or tawdry about it; everything speaks to the Moslem of the solemn character with which he invests his Jehovah.

Close to the mosque is the **Zaouia** of Sidi Abd el-Kadir el-Djilani, whose confraternity has so many votaries in North Africa, although its headquarters are in Baghdad. It consists of a lofty cupola, with the usual cloisters, leading to a number of conventual cells. The principal apartment is lighted by stained glass windows.

In the centre of the town is the **Jamâa Thelatha Biban**, or Mosque of the Three Gates, one of the most ancient in the city. The façade is decorated with Cufic inscriptions recording its construction by Mohammed ibn Kheiroun el-Maâferi in the 3rd century of the Hejira, and its restoration in 844 of the same era. Its interior is a single chamber supported by sixteen Roman columns.

Perhaps the finest specimen of Moorish architecture within the city is the **Zaouia of Sidi Abid el-Ghariani**, who died about A.D. 1402. He was one of the Almoravides (*El-Marab-bitin*). The hereditary governor of

Kerouan is one of his descendants, and guardian of the sanctuary in which his ancestors are buried.

The entrance is a false arcade of white and black marble, in which is a square door, opening into an interior court of two stories; each side of this court, on the ground floor, has three arches supporting an upper colonnade. The interior is divided off by ancient columns. Beside the first arch is a second, surrounded by an arcade, supported on Roman columns. In the upper story are about thirty cells for dervishes or other holy men.

In the centre of the town is the sacred well **El-Barota**, supposed to have a communication with Zemzem at Mecca; it is enclosed within a domed building, and is the only one in the city.

Outside the city are many interesting religious edifices. Near the Bab el-Jidid is the **Jamâa ez-Zeitoun**, or mosque of the olive tree, a very ancient building. Not far from it is the conspicuous **Jamâa Sidi Amar Abada**, built in the form of a cross, and surmounted by seven cupolas, the interiors of which are decorated with Arabic inscriptions. This is of very recent construction. The person whose name it bears passed as a saint, and amused himself by fabricating gigantic swords, chandeliers, pipes, etc., covered with rude Arabic inscriptions. One of these contained a curious prediction of the French occupation. His object appears to have been to establish a reputation with posterity for being of gigantic stature and able to use the fantastic objects he passed his life in accumulating. He was greatly in favour with the Bey, who even consented, at his request, to bring up some large anchors from Porto Farina to Kerouan.

Half a mile beyond this, and to the N.W. of the town, is the most important building of Kerouan, the **Jemaât es-Sahabi**, wherein is interred one of the companions of the prophet, *Abdulla ibn-Zemâa el-Beloui*, whence its familiar name, "Mosque of the Companion." With him are buried, what

he always carried about him in life, three hairs of the prophet's beard—one under his tongue, one on his right arm, and the third next his heart. This has given rise to the superstition amongst Europeans that he was one of the prophet's barbers!

The Zaouia is entered through a doorway near the base of a minaret, in the angle of a spacious court. The exterior of this minaret is faced with tiles, and on each side of its upper portion is a window of two lights, separated by a marble pillar. The roof is of green tiles, terminating in a gilded crescent. The door enters through a vestibule, lined with *faïence* and Moorish plaster work. A second door from this opens into a cloister, the arches being supported by marble columns, and the walls decorated in the same manner as the vestibule. This leads into another vestibule crowned with a fluted cupola, also decorated with tiles, *Nuksh hadida* work, and stained glass of great beauty, but not apparently of great antiquity, probably not earlier than the 18th century. A door on one side communicates with a mosque and two other cloisters, surrounded by cells for marabets and pilgrims to the shrine. Beyond this domed chamber is a broad court splendidly adorned with tiles and plaster work, and surrounded by an arcade of white marble columns, supporting a richly-painted wooden roof. From this one enters the shrine of "The Companion." It is about six mètres square, and dimly lighted by four small windows with coloured glass; a fine chandelier of Venetian glass hangs from the dome, and there are the usual accompaniments of smaller lamps, balls, ostrich eggs, etc.

The catafalque is surrounded by a high grating and covered with two palls—one of black velvet, adorned with Arabic inscriptions, in silver, presented by Ahmed Bey, and the other of coloured brocade, sent by Sidi Es-Sadik Bey.

An adjoining chamber contains the catafalque of Abdullah-bin Sherif, an Indian saint.

The whole of this mosque has been

altered from time to time, and almost reconstructed. The upper part of the walls of the shrine are in the worst possible taste.

To the S. W. of the city is the **Cemetery**, covering an immense extent of ground, and full of the most interesting Cufic and Arabic inscriptions, which have not yet been sufficiently studied.

Continuing to the E., and passing the suburb of *Kubleyeh*, we come to the **Zaonia of the Alssaouia**, near the Tanners' gate. Most of the natives of Kerouan are affiliated to this powerful confraternity. They practise the same mystic and revolting rites as at Algiers, the guiding principle of which appears to be the utmost amount of self-inflicted bodily torture rendered supportable by religious frenzy.

There are many other interesting buildings in Kerouan, but the traveller will generally be satisfied with those just described.

ROUTE 35.

Excursion from Kerouan to Sbeitla.

This is a journey in which some privation must be expected, but the traveller will be rewarded by seeing the most beautiful, the most extensive, and the best-preserved ruins in North Africa.

It can be made in a carriage, obtainable at Kerouan, but it would be better to hire it at Susa. The cost of the carriage with four horses will be 20 f. a day; return journeys are always paid for at the same rate. This includes the food of the horses, but not of the driver.

The traveller must provide himself with bedding and provisions, as there are no habitations on the road, the population living in tents.

Kerouan to Hajeb el-Aiouan	59 kil.
Hajeb el-Aiouan to Oued Gilma	21 kil.
Oued Gilma to Sbeitla	25 kil.

The track for more than 32 kil. is over the dreary plain that isolates Kerouan like an oasis. A few kil. farther is a broken bridge and a spring with a fondouk close by, where shelter can be obtained. The scenery on approaching the mountains is heathlike and more cheerful. The country appears quite deserted, except by large flocks of sheep and goats, and numerous coveys of partridges. It is only at nightfall, when the Arab fires are lighted for the evening meal, that one becomes aware of a considerable scattered population living entirely in tents. The track once again is on lower ground, which is marshy at all seasons of the year, and after heavy rains is impassable for carriages. The camp newly formed at *Hajeb el-Aiouan* is now visible on the hillside. Here, by permission of the Commandant, to whom a written introduction is advisable, shelter can be had for the night and provisions purchased at the canteen. The country west of this must have been at one time thickly populated. There are remains of numerous Roman villages, and cut stones of large size are standing in all directions. Oued Gilma, so called after a stream of that name, is an abandoned French camp, where there are a large number of unroofed dwellings. The traveller cannot expect to find shelter here. There is an Arab settlement close by. This is the site of the ancient *Chilma*, or *Oppidum Chilmanense*, which does not appear to have played a very important part in history.

The track then crosses a number of water-courses, and then, winding round the hillsides, reaches

Sbeitla. There is no accommodation here beyond a half ruinous and deserted fondouk. This name, like so many others, is merely an Arab corruption of the ancient one, *Sufetula*. No city in Africa possessed finer specimens of Roman architecture, and even as late as the Arab invasion it continued to be one of the most important cities in Byzacena.

Here took place the first great and disastrous encounter between Christianity and Mohammedanism in North

Africa, when the army of the Exarch Gregorius was utterly exterminated by Abdullah ibn-Sâad, and so much booty was taken that, according to the Arab historians, every horseman got 3000 dinars, and every foot-soldier 1000.

One of the most remarkable features of this part of the country, and which evidently led to its selection as the site of the ancient city, is its excellent water supply. Here the **Oued Sbeilla**, which for a great part of its course is lost in the sand, flows in a clear and beautiful stream, never dry even in summer.

The form of the ancient city is still perfectly apparent, and many of the streets can be traced in their entire course.

To the S. of the town is the *Triumphal Arch of Constantine* (A. D. 305), which bears not only his name, but also that of Maximian, by whom he was adopted. It has a single opening, and the four Corinthian columns that decorated its principal façade were entirely isolated from the walls; these have now fallen down, and lie in fragments at the base of the monument.

The most important of the ruins is the **Hieron**, so called, or enclosure, on the N. W. side of which are the magnificent remains of **Three Temples**, partly attached, and together forming one design. It is about 92 mètres in length and 70 in width. It had on the S. E. side, facing the temples, but not in the axis of any one of the three, being nearly 6 mètres out of the central line, a triumphal gateway of very excellent design. Within the gateway was a large portico, the roof being supported by shafts of the Corinthian order, and communicating with a colonnade which appears to have been carried round three sides of the enclosure. On the S. W. side was a series of shops built against the enclosing wall. On the opposite side was another entrance to the Hieron, and two archways connecting the first and third temples with the central one gave access from a street running along the back wall of the three temples. The porticoes, each of which was supported by six monolithic shafts of great size,

were on a splendid scale of design, and, judging from sculptured fragments lying on the ground, must have been of a very decorative character. The paving of the porticoes appears to have been on the same level, there being separate flights of steps to each temple. The external walls of the *cellæ* of the side temples were enriched by pilasters of the Corinthian order, those of the central temples by engaged shafts of the Composite order. The surfaces of those attached to the walls were raised and rusticated, giving a bold character to the design. The entire structure, about 36 mètres from end to end, was raised on a high stylobate of bold design. The enrichments of the cornices and soffits were beautifully chiselled, and owing to the extreme hardness of the limestone, which was quite white when quarried, but assumed a golden-brown tint after a lapse of time, the decorative work is in a fairly perfect condition. The *Hieron* itself was paved with very large flat stones, as smooth as marble. The triumphal gateway before referred to was enriched with rusticated engaged shafts, corresponding with those of the central temple.

Wilmanns, writing of this place in 1880, says:—“*De fortuna civitatis cujus ruinae et magnae et pulchrae jure ab omnibus qui eas viderunt celebrantur nihil scimus.*”¹

It is to be hoped that not only in the Hieron but in other parts of the city excavations will be made. The entire façades of the three temples with their inscriptions, and probably much sculptured ornament, are now buried in the soil, within a confused mass of gigantic masonry. In other parts of the city, the streets of which are clearly defined, there is little doubt that excavations, judiciously conducted, would be attended with surprising results.

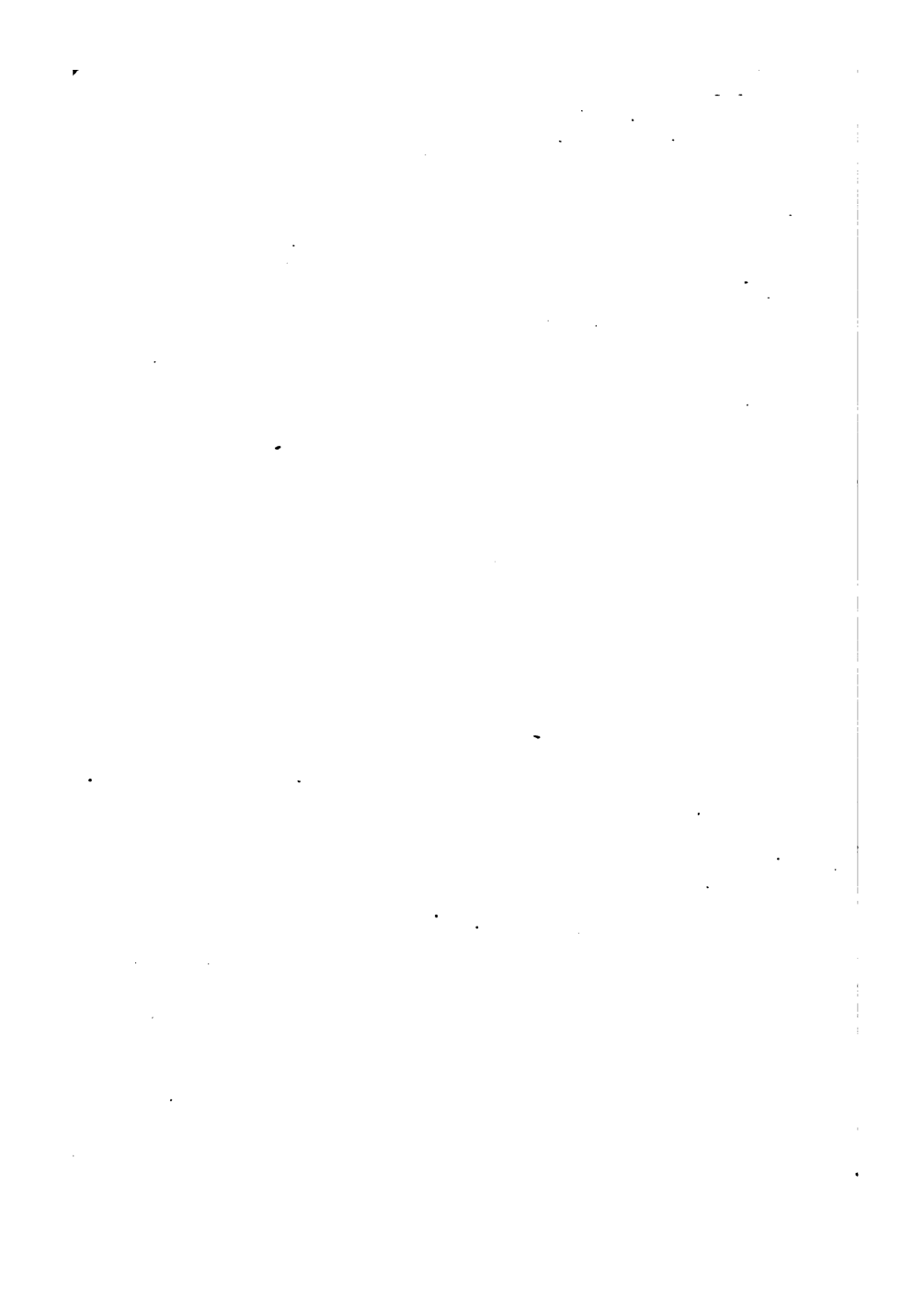
The *Amphitheatre* is at the N. of the city. It was circular in form, but is now entirely destroyed.

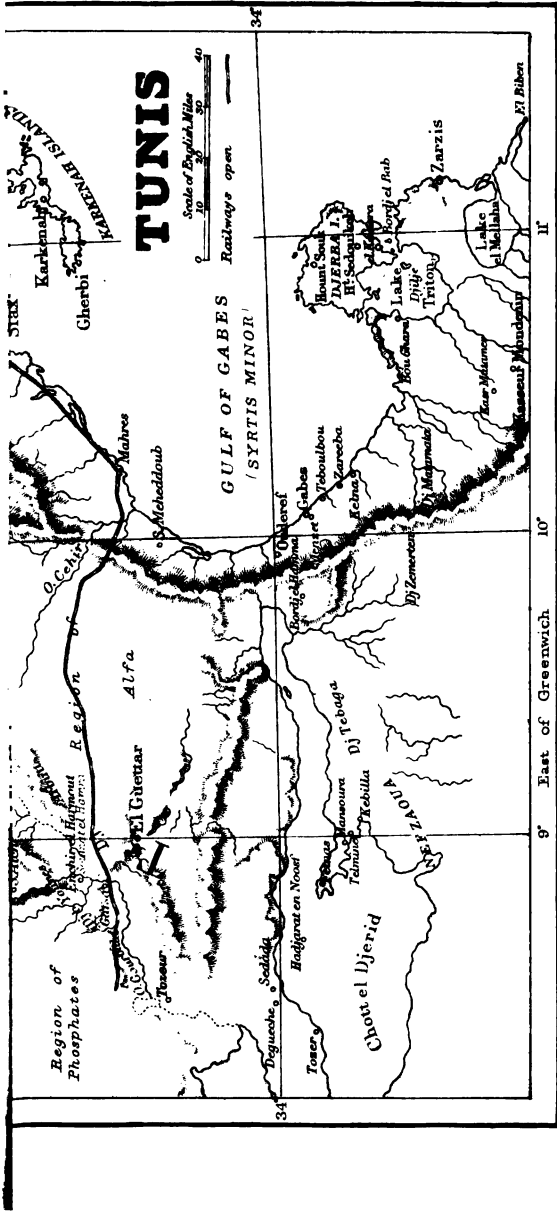
¹ Since the above was written, Sufetula has been carefully explored by French officers and savants. Mr. Graham also has published beautiful illustrations of it in the *Trans. Royal Inst. Brit. Arch.* New Series, vol. i.

Many other important ruins exist, but they sink into insignificance when compared with the temples.

There is absolutely no limit to the excursions that may be made on horseback, but they should only be undertaken by people in good health and prepared to encounter a considerable amount of inconvenience. Horses and mules can readily be hired for about 4 or 5 f. a day, and local guides will be supplied by the kaid of the various

districts, who are always courteous and obliging, especially if the traveller has letters of introduction to them. Accommodation of the roughest description, often no better than an Arab *gourbi*, is procurable; but the traveller is sure to be rewarded, often by beautiful scenery, always by Roman remains of surpassing interest. It is altogether beyond the scope of such a work as the present to give itineraries of such journeys as are not likely to be undertaken by the ordinary traveller.





London, Edward Stanford, 12, 13 & 14, Long Acre, W.C.



INDEX AND DIRECTORY, 1902.

N.B.—*All Railway and Steamer Times are subject to occasional alteration. The current Time-tables should be consulted.*

The Publisher, Mr. Stanford, 12, 13, and 14, Long Acre, London, W.O., is always grateful to travellers who are kind enough to notify him of any inaccuracies which they may have observed in these or the foregoing pages.

A		
ABD-EL-KADER, 116.		
ABD-EL-KADER, SAIDA OF, 289.		
ABD-EL-OUAD, 269.		
ADELIA, 180.		
Road for Milianah ; omnibuses meet every train from Algiers, $\frac{3}{4}$ hr., 1 f.		
AFREVILLE, 151, 180.		
Buffet at station. Passengers generally use the wagon-restaurant in the train. <i>H. de Vaucluse</i> , moderate. Omnibus to Milianah, $1\frac{1}{2}$ hr., 1 f. ; to Teniet-el-Ahd, meets morning train, 8 hrs., 6 f. Carriages to Teniet, 20 f. per diem.		
AFLOU, 265.		
AGHADIR, ruins of, 268.		
AGUGLIA, island, 133.		
AHL KSAR, caverns at, 167.		
AÏN-ABID, 250.		
AÏN-ADGEL, 174.		
AÏN-AMARA, or EL-MARRAH, 252.		
AÏN-ARNAT, 171.		
AÏN-AYAT, spring, 323, 324.		
AÏN-AZOUAGHA, 242.		
AÏN-BARBAR, copper mines, 122, 127.		
AÏN-BARID, 173.		
AÏN-BEIDA (CONSTANTINE), 172, 247, 248, 250.		
Railway open from Oulad Rahmoun.		
<i>Hôtel d'Orient.</i>		
[x. — 1902.]		
	Omnibus to Aïn-Khenchla, 45 kil., every morning at 4 A.M.	
	AÏN-BEIDA (ORAN), 226, 259.	
	AÏN-BEINAN, 107, 110.	
	AÏN-BESSEM, 173.	
	AÏN-BOU-ARREREDJ, 169.	
	AÏN-BOU-DINAR, 260.	
	AÏN-BOU-M'RAOU, 119.	
	AÏN-CHEGGA, 231.	
	AÏN-DJOUGAR, 323.	
	AÏN-DOULA, spring, 120.	
	AÏN-DRAHAM, 312, 316, 317, 318.	
	<i>Hôtel des Pacificateurs</i> , poor.	
	AÏN-EL-ARBAA, 278.	
	AÏN-EL-BORDJ, 247.	
	AÏN-EL-ESNAM, 167.	
	AÏN-EL-GHORAB, 175.	
	AÏN-EL-HADJAR, 211, 289.	
	AÏN-EL-HAMMAM, 157.	
	Name recently changed to MICHELET.	
	<i>Hôtel des Touristes</i> , fair.	
	AÏN-EL-HAMMAM, Dept. of Oran, 289.	
	AÏN-EL-IBEL, 162.	
	AÏN-ESH-SHANIA, 243.	
	AÏN-ET-TURK, 194.	
	AÏN-FAKROUN, 247.	
	AÏN-PEKRINA, 292.	
	AÏN-FEZZA, 268, 283.	
	AÏN-GHORAB, 266.	
	AÏN-GHORABA, caravan-serai, 276.	
	AÏN-GUETTAR, 242, 243.	
	AÏN-KERMAN, caravan-serai, 174.	
	AÏN-KHENCHLA, 224, 226, 248, 249.	
	AÏN-KHIAL, 278.	
	AÏN-MAKLOUP, 159.	
	AÏN-MEIMOUN, 226.	
	AÏN-MELAH, 175.	
	AÏN-MELILA, 216.	
	AÏN-MOKRA (MOKTA-EL-HADID), iron mines, 127.	
	By railway from Bône.	
	AÏN-MOUDJARAR, 160.	
	AÏN-MOUDJEBAR, 160.	
	AÏN-OMM-EL-ALLEUG, 167.	
	AÏN-OUERROU, 161.	
	AÏN-OUSSERA, 160.	
	AÏN-REGADA, 250.	
	AÏN-SABA, 160.	
	AÏN-SAHRA, 279.	
	AÏN-SEFRA, 290.	
	AÏN-SEPSIFA, 290.	
	AÏN-SENNOUR, 310.	
	AÏN-SFISSIFA, 13.	
	AÏN-SKOUN, 283.	
	AÏN-SMARA, quarries of Oriental alabaster at, 210.	
	AÏN-SUEFRA, ravine, 260.	
	AÏN-TAHAMIMIME, 309.	
	AÏN-TASSERA, 170.	
	AÏN-TÉDELES, 262.	
	AÏN-TEKBALET, 278.	
	AÏN-TELLOUT, 267, 283.	
	AÏN-TEMOUCHENT (ORAN), 277, 278, 291.	
	<i>Hôtel de Londres.</i>	
	Diligences daily to Tlemçen and Beni Saf.	
	AÏN-TOLBA, 291.	
	AÏN-TOUKRIA, 153.	
	AÏN-TOUNDA, ravine, 185.	
	AÏN-TOUTA, 226.	
	AÏN-YAGOOT, 216.	

AÏN-YEMAM, cavern, 276.
AÏN ZEBOUJJA, 107.
AÏOUN SÂAD, 195.
AÏOUN SRAKNA, 106.
AÏOUNET - BOU - BEKR, 291.
AÏSSAOULA, Zaouia of the, 339.
AÏT-BOU-YOOSUF, 156.
AÏWENAT, or **AÏOUN-ED-DIAB**, 233, 243.
AKBOU, 157, 215, 257.
Café du Sahel.
AKBOU, mamelon of, 168, 258.
ALABASTER, quarries of, 210. See also **Onyx**, Algerian.

ALGERIA—	PAGE
Agriculture in	88
Archæology	91
Climate of	2
Colonisation of	82
Description of	13
Earthquakes in	82
Geology of	76
Government of	65
History of	21
Hot Springs in	81
Languages in	12
Mineralogy of	81
Population of	6
Railways in	6
Routes to	1
Season for travelling in	5
Sport in	68
Zoology of	71

ALGIERS, 93.	PAGE
Aïssaoui, the	101
Aqueducts	101
Cemeteries	102
Churches—	
English	96
Cathedral	99
Notre Dame d'Afrique	111
Notre Dame des Victoires	99
Ste. Croix	99
St. Augustine	100
Jesuits	100
French Protestant	100
Clubs	102
Educational Establishments	102
Environs	106
Fortifications	105
Gates	103
Harbour	104
Hospital, Civil	103
Hospital, Military	103
Houses	95

	PAGE
Jews' Synagogue	100
Kasba, or Citadel	104
Library and Museum	103
Lycée	103
Moorish Houses	95
Mosques—	
The Grand	100
The New	100
Jamia Safr	100
Zaouia of Abd-er-Rahman eth-Thalebi	101
Palace	104
Population	93
Public Buildings	101
Shops, Bazaars	96, 104
Streets and Squares	95
Zoological station	102

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Consulate, Boulevard de la République.

Hours of attendance, 8 to 11 A.M., 1 to 3 P.M.

Consul U.S.A., Daniel S. Kidder, Esq., 14 Rue Mogador.

Hotels. For travellers who only intend to spend a few days in Algiers, it may be convenient to go to a hotel in town; but for a lengthened stay, those at Mustapha are in every way preferable. The higher up on the hill the better is the air. The cost of first-class hotels is pretty much the same, from 12.50 f. to 15 f. per diem. Second-class hotels cheaper, from 10 to 12.50 f.

Hotels in Town. First Class: *H. d'Europe*, the best, on the *Boulevard de la République*. *H. des Étrangers*, excellent cuisine. *H. de l'Oasis*, on the *Boulevard*. Second Class: *H. du Louvre*; *Hôtel de Paris*; *H. de Genève*.

Hotels at Mustapha Supérieur.—First Class: *Hotel St. George*, excellent, picturesque, fine sheltered garden. *Hôtel Splendid*, good, commanding situation. *Grand Hôtel de Mustapha*, under new management, entirely re-furnished, fine grounds. *Hôtel Kirsch*, comfortable. *Hôtel Continental*, excellent. Second Class: *Pension Olivage*, comfortable, good garden. *Hôtel Victoria*, near St. George, fine view. *Hôtel Anglo-Suisse*, at the Agha, well managed. *Pension Victoria*; *Hôtel Hollandais*, at the Agha.

Restaurants. In every hotel. *Taverne Grüber*, Boulevard de la République. Several *Fish Restaurants* near Fish Market.

Cafés: *Café de la Bourse*; *d'Appolon*; both on the Place du Gouvernement; *Grüber*, B. de la République; and many others.

Means of Communication. Always consult time-tables of various companies.

A. Compagnie Générale Transatlantique, see p. 1.

I. Departures from Marseilles to Algiers, Mon., Wed., Thurs., and Sat., 1 P.M. Return Tues., Thur., and Sat., 12.30 P.M.; also Mon., 2 P.M. The passage by the fastest boats occupies about 26 hours.

Cost of Passage to Algiers, 120 f. first class, 85 f. second class, including food.

Departures from Al-

giers to Tunis, Sat., 6 P.M., calling at Bougie, Djidjelli, Collo, Philippeville, Bône, La Calle, Tabarka, Bizerta, Tunis. Arr. Tunis, Wed., 3 P.M.

B. Compagnie de Navigation Mixte (Touache). Leaves Marseilles, Thur., 4 P.M. Arr. Sat., 3 A.M. Leaves Algiers, Sun., 12 noon. Arr. Marseilles, Mon., 10 P.M. Price of passage, 60 f. 1st class; 45 f. 2nd class.

C. Transports Maritimes à Vapeur. Leaves Marseilles for Algiers Wed. and Sat., 6 P.M. Return Tues. and Sat., 5 P.M. Price of passage, 60 f. 1st class; 45 f. 2nd class.

LIVERPOOL TO ALGIERS. The *Papayanni* Line runs steamers about every 10 days (fare £10); the *Moss* Line, every 3 weeks.

Cabs. Every public conveyance is bound to produce a table of fares. For a whole day (12 hrs.), 20 f.; half a day (6 hrs.), 11 f. By the hour, in town, 2 f.; outside, from 2.40 to 3 f. By the course, from 1 to 7 f. according to distance. See table.

Omnibuses. Good services run in all directions. To and from the Colonne Voirol every hour, at the half hours; to Mustapha Supérieur at the hours. There are others to *Mustapha Inférieur*, *Hussein Dey*, *St. Eugène*, *Pointe Pescade*, *El-Biar*, etc. Fares from 10 c. to 40 c.

Electric Tramway, from town to Colonne

Voirol, and along the lower road as far as *Maison Carrée*.

Railway Station (terminus of all lines), on the quay. Passengers for *Mustapha Supérieur* may get out at the previous station on the line, that of *L'Agha*, but should arrange beforehand for a carriage.

Theatres, Municipal, in the Place Bresson, a handsome edifice capable of containing nearly as many people as the Grand Opera in Paris. *Varieties*, Rue d'Isly, good.

Societies: Société historique; d'Agriculture.

Architect: *French*, George Giuauchain, Hotel St. George.

English Doctors: Dr. Thomson, Club Buildings; Dr. Stanley Stevens, Grand Hotel de Mustapha; Dr. Nissen, a *Danish doctor*, Villa St. Augustin, all at Mustapha Supérieur.

French Doctors. Those most in the habit of attending English are Dr. Stephann, 15 Boulevard de la République; Dr. Bruch, No. 3 Rue Arago.

Nurses. The nearest place where nurses can be obtained is the Holland Nursing Institution, Villa Berthe, 14 Rue d'Italie, Nice (telegraphic address, "Woodcock, Nice"), strongly recommended.

Excellent French nurses (sisters) can be obtained at the convent of Bon Secours, Rue de la Fonderie, Algiers.

The Gardner Home at Mustapha Supérieur.

Founded by will of the late Dr. Gardner for the purpose of providing a temporary Home for English Protestant Ladies in straitened circumstances, more especially governesses, and a certain number of domestic servants. In connection with this is an **English Cottage Hospital**, with an **Infectious Ward**. Trustee of Home—Rev. E. Arkwright of Tèlemly, Alger-Mustapha.

Chemist: *Obrecht*, Rue Bab-Azoun.

Banks: *Banque de l'Algérie*, *Credit Foncier et Agricole*, *Credit Lyonnais*, all on the Boulevard de la République; *Compagnie Algérienne*, Place Bresson. Cheques on England cashed by *Messrs. Burke and Delacroix*, 2 Rue Colbert, and by *Messrs. T. Cook and Son*.

English Merchants. Messrs. Burke and Delacroix, 2 Rue Colbert, agents for Lloyd's, for the British India S. N. Company, for Holt's ocean line, and for Moss of Liverpool.

Shipping Agents: Stuart Bankhart, 36 Rampe Chasseloupe Laubat; Desseigne, 4 Boulevard de la République.

Seamen's Reading Room: No. 36 Rampe Magenta, Boulevard de la République. Books and papers will be gratefully received either there or at the Consulate.

Markets: There are markets for the sale of articles of daily consumption held every morning

in the Place de la Lyre and Place de Chartres. It is well worth while to visit these before breakfast, to see the beautiful fresh fruit, flowers, and vegetables just brought in from the country.

The fish-market is held beneath the Boulevard de la République, nearly opposite the Place du Gouvernement.

House and General Agents: *Messrs. Duntlop and Tustes*, 15 Rue d'Isly. They have also a grocery store and a butcher's shop, and send provisions of all kinds to villas at Mustapha, and generally are most useful to travellers and residents. *Mr. William Wadel*, 3 Rue Dumont d'Urville.

Churches: *Anglican*, see p. 96. Afternoon Service is held in the English library at Mustapha on Sunday.

Presbyterian, Mustapha Supérieur, built entirely at the expense of the late Sir Peter Coats, see p. 99.

Information as to hours of services posted up at hotels and consulate.

Roman Catholic, Cathedral, see p. 99; *Nôtre-Dame-des-Victoires*, Babel-Oued, formerly a mosque built in the 17th century by Ali Bitchenin, a Christian renegade; *Sainte Croix*, also an old mosque near the Kasba; *St. Augustine*, built in 1878, in the Rue de Constantine; *Jesuit Church*, in the Rue des Consuls. *French Protestant Temple*, Rue de Chartres. *Synagogue*, Rue Caton. *Mosques*, see p. 100.

Libraries: *Bibliothèque Nationale* (French). Open every day after 1 P.M. R. de l'État Major. See also p. 103. *English Circulating*, near the English Club at Mustapha. The terms are very low, and visitors are strongly advised to subscribe to it. *University*, in the École Supérieur des Lettres, etc., at the Agha.

Government Museum, Mustapha Supérieur. A military band plays every Wednesday afternoon in the Museum gardens.

Shops. The best shops are in the Bab-Azoun. The bazaars where Arab articles are sold are on the Boulevard de la République, in the passages leading from the Place du Gouvernement, the Rue de la Lyre, and the Place de la Cathedral.

Beautiful **Arab Embroideries** are made at the establishment of Madame Luce Benaben, 21 Rue des Ramparts Medée, with a branch near the Presbyterian church at Mustapha Supérieur. Monsieur Marlier, No. 3 bis Rue Dumont D'Urville, makes exquisite **brasswork**.

Booksellers: *Gavault St. Lager*, Rue d'Isly; *Jourdan*, Place du Gouvernement.

Photographers: *Famin*, Rue Bab-Azoun, unequalled for views; *Geyser*, on stairs leading to Place du Chartres from Rue Bab-Azoun, excellent for likenesses.

Livery Stables: Mame, 24 Rue d'Isly;

Moise and Jules Vitor, both on the Mustapha road, near the Sacré Cœur.

Newspapers, etc. There are many daily newspapers published in Algiers, the most important of which are the "Dépêche," the "Vigie Algérienne," and the "Telegram." There are two English papers published during the winter—the "Atlas" and the "Algerian Advertiser," which give a list of English visitors. Amongst the reviews are, the "Revue Africaine," journal of the proceedings of the Algerian Historical Society, in which and in the similar publication of Constantine, "Recueil des Notices et Mémoires de la Société Archéologique," and that of Oran, "Bulletin de la Société de Géographie et d'Archéologie," are many valuable papers on Algeria.

Baths. The best European baths are, *Bains du Hamma*, Rue du Hamma, next theatre; *Bains du Square*, Rue Arago; *Bains Michelet*, l'Agha.

Moorish Bath: Rue de l'État Major, open for men from 5 P.M. till noon next day.

Sea Baths at the Agha. **Club:** *English* (see p. 102). Members' subscriptions, 125 f. per annum. Season subscriptions, 125 f. and 10 f. entrance. Monthly subscriptions, 40 f. Weekly subscriptions, 20 f. For rules and all other information apply to honorary secretary or manager at the Club. There are

a few bedrooms available for members. There is a Golf Club in connection with the *English Club*. *Cercle d' Alger*, Boulevard de la République, entrance R. de Palmyre.

Thomas Cook and Son, 6 Boulevard de la République, where tickets to and from England and any part of Europe may be obtained. Banking business carried on. **Murray's Handbook for Algeria and Tunis** on sale.

Local Couriers and Guides also can be had.

Post and Telegraph Offices: *Head Office*, Boulevard de la République. *Branch* in the Palais Consulaire (Chamber of Commerce), Boulevard de la République, and at Mustapha Inférieur. *Another Branch* at Governor's Palace, Mustapha Supérieur, officially styled *Mustapha Palais*.

Dressmakers: *Madame Adler*, Rue du Soudan. *Madame Philoch*, 7 Rue Rovigo.

Shoemakers: *Moreaux*, Place du Gouvernement; *Sauvage*, Rue Dumont D'Urville.

Confectioners: *Fille*, 2 Rue Bab-Azoun.

ALLAGHAN, 215.

ALLALA, river, 259.

AMER CHERAGA, plain, 209.

AMINS, the, 16.

AMMI MOUSSA, 186. *Hôtel des Voyageurs*, very poor.

ANCHIS DAMOUS, 243.

ANNOUNA, 250, 251, 252.

ARBATACH, 112.

ARIANA, 307.

ARIANA, plain of, 322.

ARRÊT DES PINS, 284.

ARRÊT DES TREMBLES, 282.

ARRÊT OF ST. LUCIEN, 281.

ARZEU, 284, 286.

Railway to Saida and Ain Sefra.

British Vice-Consul, Aimé Gastray, Esq.

ARZEU, OLD, 286.

ATLAS MOUNTAINS, 14, 176.

AUBERGE DE LA RAMPE, 151.

AUMALE, 117, 167, 173. *Hôtel de Roulage*.

Diligence from Algiers every second day, 17 hrs. 20 f. A better route from Bordj Bouira.

Excursions from, 174.

AURÈS MOUNTAINS, 18, 224, 229, 256.

AZAZGA, 155, 214.

Hôtel Vayssière, poor.

AZIB - BEN - ALI - CHERIF, 215.

AZIB-ZAMOUN, 153.

AZROU, 257.

AZROU-N-TOHOUR, 258.

AZZEFOUN, 115.

B

BAB EL - KHAMIS, arch, 274.

BAB ES-SAJAN, 301.

BAB ES-SELAM, 301.

BAB KHALID, 323.

BAB SIDI ABDULLA ESH-SHERIF, 301.

BAB TAZZA, mountain, 280.

BABA ALI, 176.

BABOR, mountain, 115; ascent of, 119, 211, 258.

BAHIRA - ET - TOWILA, plain, 247.

BAHR EN-NISSA, 120.

BAINS DE LA REINE, 194.

BARDO, the, 301, 307.

Rail from Tunis in 15 minutes.

BARRAGE OF THE KHAMIS, 112.

BARRAL, 254.

BARRAL, fort, 116.

BASTION DE FRANCE, 131.

BATNA, 217, 225, 226, 248, 249.

H. Continental; *H. des Étrangers*, both fairly good. The latter has a branch at Timegad.

Excursions from, 217.

Carriages can be hired for Timegad, 25 f.; and mules for cedar forest.

BATNA, cedar forest, 223.

BAUDENS, 279.

BEAUPRÊTRE (Bou Fai-ma), 153.

BEDEAU, 284.

BEJA, 313.

BELAD ER-RAMEL, 133.

BEL ABBÈS, see **SIDI**, 268.

BEL-HACEL, 262.

BEL KEFIF, hill, 233.

BELLE-FONTAINE, 165.

BELLEVue, 262.

BELVÉDÈRE, the, 297, 301.

BEN HINNI, gorge, 165.

BENI AAD, stalactite caves, 275.

BENI ABBÈS, 294.

BENI AMRAN, 165.

BENI BIZAZ, 119.

BENI FOUGHAL, 119.

BENI ISGUEN, 163.

BENI ISMAIL, 212.

BENI MANSOUR, 157, 168, 215.

BENI MERED, 176.

BENI MISTER, 279.

BENI M'ZAB, race, 12, 163.

BENI M'ZAB, oases, 13, 18.

BENI OURTLAN, 169.

BENI SAF, 278, 291, 292, 293.

No decent *hotel*.

Diligences to Ain-Temouchent and Tlemçen. The former leaves at 2 a.m., so that a traveller can reach Algiers by 10 p.m.

BENI SALAH, mountains, ascent of, 177; village, 177.

BENI SNOUS, mountains, 276.

BENI YENNI, 156.

BENIAN, 289.

BERRIAN, 164.

BERROUAGHIA, 159.

Hôtel de Roulage, poor.

This is the terminus of railway from Blidah. The diligence to El-Aghouat may be taken up here; it starts from Médéa every alternate day, and occupies 3 days in the journey. Passengers change at Boghari and Djelfa. The hours are as follows:—

Leaves Médéa 7 P.M.

Arrives Berrouaghia 11

P.M. Arrives Boghari 5

A.M. Coupé to Boghari

f. 8.10, thence to El-

Aghouat, f. 55.55.

BERZEGAN, 241.

BIBAN, 335.

BIBANS, 168, 256; *see* Portes de Fer.

BIN ALI CHERIF, Bordj of, 215.

BIN BECHIR, 313.

BIN CHICAO, 159.

BIN YOUN, 267.

BINT SAIDA, 323.

BIR-EL-ARCHE, 172.

BIR EL-BOUTTA, 325.

BIR REBALOU (AKBALOU), 173.

BIR ROUGA, 247.

BIR TOUTA, 176.

BIRKET-EL-FARAS, lake, 242.

BIRKHADEM, 108.

BIRMANDRAIS, 107.

BISKRA, 226, 227, 228, 230, 333.

The traveller going from Algiers to Biskra should break the journey at El-Guerrah, not at Batna, which is most uninteresting.

Royal Hotel; the newest and one of the best in the colony; charges from 10 to 15 f., wine excluded. *Hôtel Victoria*, also good, close to the station. *Grand Hotel Dar Diar* (casino).

Carriage to Sidi Okba, 20 f.

Diligence to Tuggurt.

A light two-wheeled trap runs thrice weekly, occupies two days—bad—50 f. each way. Mules preferable; 5 f. a day. PAGE

Climate 228

Fort St. Germain . . . 228

Hot Baths 229

Market-place 228

Negro Village 228

BISKRA, oasis, 229.

BISKRIE, race, 12.

BIZERTA, 133, 314, 315.

Grand Hôtel d'Europe;

Hôtel Beau Rivage, fairly good.

The railway to Tunis is now running, 3 trains each way daily, about 3½ hours.

British Vice-Consul.

The Hon. T. Bourke.

BIZERTA, lake of, 134.

BIZOT, 195.

BLAD GUITOUN, 153.

BLIDAH, 158, 176.

Hôtel d'Orient, good;

Hôtel Gerond, comfortable.

Railway Station a short distance from town. Omnibus fare, 1 f. Junction for Medea.

Hospital for civil and military, near the Porte d'Alger. PAGE

Cavalry Barracks . . . 177

Gates, Hospital, Theatre 177

History 176

Promenades 177

Situation 177

BOGHAR, 160.

Hôtel Celestin.

BOGHARI, or **BOKHARI**, 160.

H. Celestin, tolerable.

Omnibus to Boghar.

BÔNE, 122, 244, 254, 255, 309.

Brit. Vice-Consul: Abel De la Croix.

U.S.A. Consular Agent: Antoine F. Garbe, Esq.

Hôtel d'Orient (A. Mercier, proprietor), in the Cours Nationale, food and wine good, charges moderate—café complet with eggs 2 f., déjeuner including wine f. 3.50; *H. de Commerce* (Marius), Rue des Volontaires.

Station of Eastern Telegraphic Company.

Railway to Constantine and Tunis.

Means of Communication: *Compagnie Gén. Transatlantique*.

I. Leaves Marseilles for Bône, Tues. (direct), 5 P.M., Sat. (via Philippeville), noon. Leaves Bône for Marseilles, Tues. (direct), 11 P.M., Thur. (via Philippeville), 6 P.M. Leaves Bône for Ajaccio, fortnightly, Sat., midnight (via Porto Torres), Sun., fortnightly, 3 A.M. Correspondance at Ajaccio for Nice and Marseilles; Bône to Philippeville, Collo, Djidjelli, Bougie, and Algiers, Fri., 10 P.M.

Compagnie de Navigation Mixte (Touache). Dep., Marseilles, Thur., noon, touches at Philippeville. Ar. Bône, Sun., 5 A.M. Leaves Bône, Mon., 6 P.M., calling at Philippeville. Ar. Marseilles, Wed., 10 P.M.

Transports Maritimes à Vapeur. Leaves Marseilles, Mon., 5 P.M. Return Thurs., 5 P.M. Price of passage, 50 f.

- Also *viâ* Philippeville, leaves Marseilles, Wed., 5 P.M.; returning Sat., 5 P.M. PAGE
 Cathedral, Church, Mosque . . . 124
 Excursions . . . 124
 Harbour, Quays . . . 124
 History . . . 122
 Kasba, Barracks, Military Hospital, Theatre, Roman Remains . . . 124
 Squares . . . 124
 Streets . . . 124
- BONI**, 169, 256, 258.
BORDJ BENI MANSOUR, 168.
BORDJ BOGHNI, 114, 167.
BORDJ BONI, 255.
BORDJ BOU-ARREDJ, 169, 174, 255, 257.
Hôtel des Voyageurs.
BORDJ BOUIRA, 167, 216.
Hôtel d'Europe, H. de la Colonie. Comfortable. A convenient first stage on the way to Constantine.
 Diligence to Annmale, 5 hrs., twice daily.
BORDJ CASTILLE, 335.
BORDJ DJEDID, 316.
BORDJ EL-AHMER, 116.
BORDJ EL-KALA, 128.
BORDJ ER-RABTA, the, 301.
BORDJ KAID EL-AKHDAR, 242.
BORDJ KEBIR, 334.
BORDJ MEDJANA, 255.
BORDJ MENAÏEL, 153.
Hôtel de la Colonie.
BORDJ SABATH, 250.
BORDJ SEBAOU, 154.
BORDJ TAZMALT, 257.
BORDJ TOUM, 314.
BORJ ALI RAIS, 301.
BORJ ER-ROOS, 334.
BOTIOUA, 286.
BOU-CEDRALA, 160.
BOU CHATER, 137.
BOU DJEBEL, plain, 241.
BOU DJEMAA, river, 124.
BOU GHARA, 335.
BOU-GHAZOU, 160.
BOU GUELFA, 154.
BOU-HALLOUFA, 185.
BOU HAMMAMA, 226.
BOU KADIR, 184.
BOU KAHIL, mountains, 18.
BOU KANEFIS, 283.
BOU KSAIRA, 122.
BOU LIPPA BAY, 130.
BOU MEDFA, 179.
BOU MERZOUG, spring, 172, 207.
BOU NOUARA, 249.
BOU NOURA, 163.
BOU ROUMAN, mountain, 235.
BOU SÄADA, 174; carriage roads from, 175.
 Diligence every 2 days from Bouira, 26½ hours.
Hôtel du Petit Sahara, very fair.
BOU SAR, mountain, 153.
BOU SELAM, river, 211.
BOU SFER, 194.
BOU TLELIS, 277.
 A good inn.
BOU ZAREA, 106, 107.
BOU ZHOUAR, mountain, 153.
BOU ZIGZA, 112, 167.
BOUDOUAOU, 165.
BOUFARIK, 176.
Hôtel Benoit, H. Mazagran, Cercle Civil, frequented by colonists; bedrooms.
BOUGIE, 115, 213, 254.
Hôtel de France; Hôtel d'Orient et de la Marine.
 Direct railway communication with Algiers.
Compagnie Générale Transatlantique. Leaves Marseilles for Bougie direct, Sun., 5 P.M.; *viâ* Algiers, Thurs., 1 P.M. Leaves Bougie for Marseilles direct, Thur., 8.30 P.M.; *viâ* Algiers, Sun., 6.30 P.M. Leaves Algiers for Bougie, Wed., 8 P.M.; Sat., 6 P.M. Leaves Bougie for Algiers, Tues., 8 P.M.; Sun., 8 P.M. Carriage for Setif through Chabet, 120 f.
 See **Setif**. PAGE
 Amphitheatre . . . 117
 History . . . 115
 Kasba, Forts . . . 116
 Population . . . 115
 Roman remains . . . 117
- BOUGIE**, gulf of, 213.
BOUHIRA, 171.
BOUIRA, 173.
BOUTAN, river, 180.
BRÉDÉAH, 194, 277.
BUGAUD, village, 126.
BULLA REGIA, 312; ruins of, 313.
- C
- CADIS**, 9.
CAMMERATA, 277.
CAMP DE GÉNIE, 317.
CAMP DES CHÊNES, 151, 158.
CAMP DES ZOUAVES, 160.
CAMP DU MARÉCHAL, 154.
CAP DE FER, OR RAS EL HADID, 122.
CAP DE GARDE, 122.
CAP FILFILA, 122.
CAP GROS, 128.
CAP NEGRO, 133.
CAP OKAS, 210.
H. Cap Okas.
CAP ROSA, 128.
CAPE AFIA, light on, 120.
CAPE BLANC, 133.
CAPE BON, 308, 325.
CAPE BOUAC, 115.
CAPE BOUGIARONE, 118, 119; light on, 120.
CAPE CARBON or EL-METKOUB, 115; light-house, 117.
CAPE CARTHAGE, 137, 307.
CAPE CAVALLO, 117, 119.
CAPE CAXINE, 110.
CAPE CORBELIN, 115.
CAPE FIGALO, 277.
CAPE MATIPOU, 112, 114.
CAPE NOE or NOUN, 292.
CAPE NOIR, 115.
CAPE ROUX, 131, 316.
CAPE SKIKDAH, 120.
CAPE TEDLES, 115.
CAPSA, 241.

CARAGA, 330.
CARTENNA, 260.
CARTHAGE, 301, 320, 321, 322.
 Carriage hire from Tunis *via* Marsa, 15 f.

	PAGE
Amphitheatre	306
Basilica	306
Byrsa, the	304
Chapel of St. Louis	302
Circus, Theatre	307
Cisterns	305
Douar esh-Chott	307
Forum	304
Harbours	305
History of	301
Palace of Dido	304
Temple of Esculapius	304

CARTHAGE, aqueduct of, 315, 320.
CASSAIGNE, 261.
CASTIGLIONE, 147.
Hôtel de Tapis Vert, poor. Other hotels principally for summer bathers.
CATADA, plain of the, 321.
CAVAIGNAC, 259.
CEDOUKESH, 334.
CEBRIEN, 334.
CHABET-EL-AKHIBA GORGE, 169, 172, 210, 211, 308.
CHABET-EL-AMBEUR, 153.
CHABET-EL-LAHAM, 277.
CHAMP DE MANGEVRES, 109.
CHANZY, 283.
CHAPEAU DU GENDARME, 162.
CHARRIER, 289.
CHARBON, 184.
CHÂTEAU NEUF, 107, 109.
CHEKLI, island, 138.
CHELIFF, plain of the, 14, 83, 151, 181, 260.
CHELIFF, river, 14, 17, 181, 259, 261, 285.
CHELLATA, 257.
CHELLATA, pass of, 215.
CHELLIA, ascent of, 225, 256, 258.
CREMIN DES TOURISTES, 202.
CHEMTOU, 311, 312.
CHÉNIA, 170.

CHENNOUA, marble quarries, 144.
CHERAGAS, 109.
CHERCHEL, 144, 260.
Hôtel de Commerce, not so good as it once was.
 Diligence to meet steam tramway at Mar-engo twice daily. Diligence to Algiers by coast road every night.

	PAGE
Antiquities	145
History	144

CHERCHIRA, springs of, 336.
CHERKA, island, 331.
CHEYMA, oasis, 229.
CHEYMA, 230.
CHOTT EL-CHEGUI, 290.
CHOTT MELGHEIG, the, 18, 231.
CHOTTS, or SEBKAS, 17.
CHOUCHA OF OUARGLA, 18.
CHOUF ER-RIAD, 115.
CITÉ BUGEAUD, 110.
CLAIRE FONTAINE, 233.
 Beds in Railway Buffet, at which food is good.
CLAUZEL, fort, 116.
COL DE BABOUCH, 317.
COL DE BOUJAT, 224.
COL DE CHELLATA, 157, 258.
COL DE SABLE, 163.
COL DE TIROURDA, 157, 258.
COL DES BENI AÏCHA, 165.
COL DES JUIPS, 287.
COL DES OLIVIERES, 195.
COL DES PINS, 168.
COL TIZI, 288.
COLLO, 120.
 A diligence daily to and from the railway at Robertville.
COLONNE VOIBOL, 107.
CONDÉ SMENDOU, 195.
CONSTANTINE, department of, 13.
CONSTANTINE, 173, 195, 249, 252, 253, 308.
 Hotels. *Grand H.* good; excellent cuisine, f. 12.50; *H. de Paris.*

	PAGE
Abattoir	199
Aqueduct, Stone Pyramid to Comte Darémont	207
Barracks	200
Bridge of El Kantara	204
Churches and mosques	200
Excursions	207
Garden of the Artillery	206
Gates	198
Harem of Salah Bey	205
History	196
Kasba	206
Koubba of Sidi Mohammed el-Ghorab	203
Markets, Manufactures	207
Palace of Constantine	205
Palais de Justice, Museum	206
Roman remains	201
Sidi Rachid, Hill of Mansoura	199
Situation	198
Subterranean Passages	207
Tomb of Salah Bey	203
Warm baths of Sidi Meçid	201

CONSTANTINE, LITTLE, 259.
CORNICHE ROAD, 125.
CRÈVE-ŒUR, mountains, 287.

D

DAHRA HILLS, 14, 261.
DAHRA, the, 184, 262;
 population, 185, 186.
DAHRAOUIA, 226.
DAKHUL, prom., 325.
DAMIETTE, 159.
DAOUDA, 147.
DAYA, 283, 284, 289.
DEBBA, 188.
DEBROUSVILLE, 287.
DELI IBRAHIM, 107.
DELLYS, 114.
Hôtel de la Colonie.
 Steam tramway from Camp du Maréchal three times daily in connection with trains from Algiers.
DEREN, range, 18.
DEHRA, 276.
DJAMĀAT-ES-SAHARIDJ, 157.
DJARA, 332.
DJEBEL ABDOUNA, 195.
DJEBEL ABOU KHADERA, 243.

- DJEBEL AHMAR**, 322.
DJEBEL AMOUR, mountain, 14, 19, 163.
DJEBEL AROUSSE, 285.
DJEBEL ASSEL, 211.
DJEBEL BARBER, 187.
DJEBEL BUGHRA, 284.
DJEBEL BOU DRIECEN, 225.
DJEBEL BOU - GHAAZL, 227, 229.
DJEBEL BOU - JAGAR, 242.
DJEBEL CHENNOUA, 144.
DJEBEL DJOUGAR, 321.
DJEBEL DYR, 240.
DJEBEL EDOUGH, mountain, 122; ascent of, 125.
DJEBEL EL-ADJDAR, 266.
DJEBEL EL-ARABIA, 312.
DJEBEL EL-MELAH, 231.
DJEBEL ESH-SHAM, 151.
DJEBEL FILFILA, 122.
DJEBEL FOUA, 241.
DJEBEL GARCA, 248.
DJEBEL GUEZZOUL, 265.
DJEBEL HAMMAT, 248.
DJEBEL KALE, 243.
DJEBEL KHAROURA, 225.
DJEBEL MAADTHER, 243.
DJEBEL MAHMEI, 225.
DJEBEL MAKHEIREGA, 243.
DJEBEL MAZALA, 250.
DJEBEL MEQID, 195, 201.
DJEBEL METLILI, 226, 227.
DJEBEL MISTIRI, 240.
DJEBEL MOUZAÏA, 158.
DJEBEL NADOR, 278.
DJEBEL OUACHE, 208.
DJEBEL OUENZA, 243.
DJEBEL RESSAS, 137, 322.
DJEBEL RIGHIS, 248.
DJEBEL SEN-EL-LEBBA, 161.
DJEBEL SIDI BRAO, 172.
DJEBEL SLISSEN, 283.
DJEBEL TAPRENT, 248.
DJEBEL TMOULGA, 182.
DJEBEL THAYA, cave of, 250.
DJEBEL TIFROURA, 287.
- DJEBEL TOUMIET**, 195.
DJEBEL TUGGURT, 224.
DJEBEL YOUKOUS, 240.
DJEBEL ZAGHOUAN, 322, 324.
DJEBEL ZEBEOHA, 162.
DJEDARS (tombs), the, 265, 266.
DJEDEIDA, 314.
DJELFA, 161.
Hôtel Léon Gazelles.
DJENAN-BOU-REEQ, 290.
DJENAN EL-MESKINE, 281.
DJERBA, 334, 335.
 British Cons. Agent,
 M. Joseph Pariente.
 No hotel.
DJEZIRAT-EL-HAMMAM, island, 330.
DJIDJELLY, 117.
Hôtel d'Orient. A diligence in two days to Constantine, *vid* Mila.
 The road runs along the coast from Bougie.
 Steamer (*Cie. Transatlantique*) to Bougie, Algiers, and Marseilles, Sun., 9 A.M. To Collo, Philippeville, Bona, La Calle, Tabarka, Bizerta, and Tunis, Sun., 10 P.M.
DJILALI-BIN-AMAR, 263.
Caravanserai.
DJINET, cape, 165.
DJOUGAR, 320, 321, 323.
DJURDJURA RANGE, 165, 168, 215, 255, 256, 257, 258.
DOLMENS OF KHENEG, 210.
DOMAINE DES LIONS, 122.
DOUAR ESH-CHOTT, 307.
DOUARS, 9.
DOWAB OF EL-HADJ BEL KASSEM BEN ZORARI, 318.
DRA-BIN-KEDDA, 154.
DRA-EL-MIZAN, 153, 167.
Hôtel de la Jeune France, fairly good.
- DREA**, 233.
DROH, oasis, 229.
DURLINEAU, 287.
DUPERRÉ, 181.
DUVIVIER, 254, 309.
 Junction for Tunis.
 Village $2\frac{1}{2}$ kil. from Rly. Sta. Of the two hotels that of Marius Lavagne is the least bad.
DUZERVILLE, 255.
- E**
- EDOUGH, FOREST OF**, 125.
EGHRIS, plain, 279, 288.
EL-AOHIR, 169.
EL-ADJIBA, 167.
EL-AFFROUN, 138, 178.
 A steam tramway runs to Marengo.
Hôtel de la Gare, at station; *H. du petit frère*, in village; no sleeping accommodation.
EL-AFIA, island, 117.
EL-AGHOUAT, 162.
Hôtel Peregrini.
 Diligences from Médéa in 2 days, 80 f.
 Carriage, 400 or 500 f., and to the oases of the Beni M'zab.
EL-AIOUN, 317.
EL-ANASSER, 170.
EL-ARBA, 178.
Hôtel des Étrangers, fairly good.
EL-ARBAA, 225.
EL-ARIA, 208, 209.
EL-ARICLA, 276.
EL-ARRICHA, 284.
EL-ARROUCH, 195.
EL-ASSAFIA, oasis, 163.
EL-ATEUF, 163.
EL-BAHIRA, lake, 138.
EL-BAJA, 313, 314.
EL-BALI, 225.
EL-BIAR, 106, 226.
EL-BIOD, 290.
EL-CHAIBA, forest, 179.
EL-DJEM, 328, 329, 330.
 Comfortable quarters and good food can be obtained at very moderate

- charges at the *Schoolhouse* and *Post-Office*. Telegram or note should be sent beforehand.
- EL-DJERDA**, promontory, 120.
- EL-ENSOB**, 291.
- EL-ESNAM**, 167.
- EL-EUBBAD**, 272.
- EL-GHADAMSI**, island, 330.
- EL-GREIZ**, 279.
- EL-GUERRAH**, 172, 216. Junction for Biskra. A fairly good *hotel*, and an excellent *buffet*.
- EL-HAOEIBA**, 283.
- EL-HADJAR**, 195.
- EL-HADJEB**, 178.
- EL-HAMELIA**, 171.
- EL-HAMMA**, oasis, 195.
- EL-HAMMAM**, hot springs, 189, 170.
- EL-KALAA**, 187, 242.
- EL-KANTARA**, 226, 227, 261, 334, 335. *Hôtel Bertrand*.
- EL-KANTARA**, bridge of, 200.
- EL-KANTOUR**, mountain, 195.
- EL-KASBA**, 324.
- EL-KEF**, 312, 318, 319, 320. The accommodation for European travellers is of the roughest kind. Lodgings can be had at several houses dignified as *hôtels*. *Hôtel de Kef; H. de France; H. Messageries Guiraud*. All bad. Service of omnibuses with Souk el-Arbâa.
- EL-KHADTHERA**, 290.
- EL-KHENEG**, 209.
- EL-KISSA**, 242.
- EL-KREIDER**, 290.
- EL-KSAR**, 279.
- EL-KSEUR**, 214.
- EL-MÄADER**, 217.
- EL-MAI**, 289.
- EL-MANÄÄ**, 225.
- EL-MAOUNA**, mountain, 254.
- EL-MATEN**, 214.
- EL-MERIDJ**, 242, 318, 320.
- EL-MESSAN**, 161.
- EL-MESSEN**, 167.
- EL-MILA**, 203.
- EL-MILIA**, 120.
- EL-OUED**. See Addenda.
- EL-OURIOIA**, 171, 211.
- EL-OURIT**, falls, 275.
- EL-OUSTANI**, island, 330.
- EL-OUTAÏA**, 227.
- EL-OUTAÏA**, mountain, 174.
- EL-WADHAHA**, 225.
- ENFIDA**, the, 326.
- ER-RAHEL**, 277. Omnibus meets train for the thermal springs of Bou Hadjar, 12 kil.
- ES-SAHEL**, 328.
- ES-SNUSI KOUBBA**, 272.
- ES-SOUMAH**, 208.
- EULMA**, tribe, 171.

F

- FEDJ-BOU-GHAREB**, 209.
- FEDJ-EL-MAKTA**, forest, 309.
- FEDJ-EL-MERIDJ**, 317.
- FEIDJET EL-GHOUSSA**, 241.
- FEKAN**, 279.
- FEMME SAUVAGE**, valley, 107, 108.
- FERKATS**, 9.
- FERMATOU**, village, 211.
- FERNANA**, 315, 318.
- FESDIS**, 217.
- FEZARA**, lake, 127.
- FIGUIG**, 13, 294.
- FILIAH**, oasis, 229.
- FILLASH**, oasis, 228.
- FIRIS**, plain, 225.
- FONDUK**, 112, 167.
- FONDUK JEDID**, 308.
- FONTAINE DES GAZELLES**, 227.
- FONTAINE DU GÉNIE**, 146.
- FONTAINE ROMAINE**, 172.
- FORT DE L'EAU**, 112. *Hotel and Casino*.

- FORT DE L'EMPEREUR**, 105.
- FORT DES ANGLAIS**, 105.
- FORT GÉNOIS**, 125.
- FORT NATIONAL**, 155, 167, 170, 255, 258. *Hôtel des Touristes*, fairly good. There is a carriage road over the Col de Tirourda in course of construction; frequently rendered impassable by snow. Travellers can sleep at Michelet.
- FORTASSA**, 262. *Diligence* to Mascaro, 6 hrs., 4.50 f.
- FRAIS VALLON**, 106.
- FRANCHETTI**, 289.
- FRATELLI ROCK**, 133.
- FRENDÄ**, 265, 266, 267, 288, 289. *Hôtel Moxstracci*, poor.
- FROHA**, 288.

G

- GABES**, 331, 332, 333, 334. *British Cons. Agent*, F. Calleja. No *hotel*.
- GALITA**, island, 133, 317.
- GALITONA**, island, 133.
- GALLALA**, 334.
- GALLINA**, isle, 133.
- GALLO**, isle, 133.
- GAMRHA**, oasis, 231.
- GARTA**, oasis, 229.
- GELÄÄ**, 169, 255, 256, 257, 258.
- GELÄÄ**, river, 256.
- GELDAMAN HILLS**, 215.
- GENDARME'S CAP**, the, 233.
- GERYVILLE**, 289, 290, 291.
- GHBAL**, 189.
- GHEAR EL-DJAMÄÄ**, 251.
- GHEAR EL-MELAH**, lake, 136.
- GHEAR ROUBAN**, mines, 280, 293.
- GHARBA**, island, 331.
- GHEARDAIA**, 163.

GHARDIMAOU, 310, 311.

Examination of luggage at custom-house.

Buffet.

GHORFA DES OULAD MIRIAM, 174.

GOLEA, 18, 2d.

GOLETTA (formerly the Port of Tunis), 187, 306, 307, 325.

Brit. Cons. Agent, Alphonse Busuttill.

No Hotels. Numerous *Cafés.*

Railways, see Tunis. Steamers now go through the Canal to Tunis.

GOURAÏA, mountain, 116.

GOURAYA, 147.

GROMBALIA, 308.

GROUPE DES VEAUX MARINS, 194.

GUÉ DE CONSTANTINE, 150, 176.

GUEBAR BOU AOUN, 255.

GUELMA, 252, 253, 254, 309.

Hôtel Auriel or *d'Orient*, good; *Grand Hotel*, Rue St. Louis; *H. de l'Univers*, Rue de Bône, nearest to the railway station, which is about 300 mètres from the town. Good food.

Buffet at station.

GUÉLT-ES-STEL, 160.

GUEBRAH-EL-HOUT, lake, 130, 316.

GUEBRAH-EL-MELAH, 130.

GUEBRAH-EL-OUBEIRA, lake, 130.

GUEBRARA, 164.

GUESSIRA, ravine, 285.

GUIAREL, 291.

GUYOTVILLE, 107, 109.

H

HABRA, river, 14, 188, 189.

HADJAR-EL-MELAH, 161.

[*Algeria*.]

HADJAR ROUM, old Roman camp, 267.

HAJEB EL-AÏOUN, 339.

HAMADANA, 186.

HAMMAM BERDA, 254.

HAMMAM BOU HADJAR, 277, 278.

Hôtel des Bains, from f. 6.50 a day. Omnibus meets each train at Er-Rahel.

HAMMAM BOU HANEPIA, 287.

HAMMAM EL-ENF, 137, 308.

HAMMAM GROUS, springs, 172.

HAMMAM KSANNA, 174.

HAMMAM MELOUAN, 150.

Établissement Thermal. Poor accommodation; opens 1st May.

Excursion may be made by carriage from Algiers in one day, 30 f.

A steam tramway will shortly be opened.

HAMMAM MESKOUTIN, 250, 251, 252.

Hôtel clean and comfortable. Engage rooms by letter or telegraph to Director. Cost 14 f. a day; reduction by arrangement for lengthy stay or for a party.

Post Office and Telegraph on the establishment.

HAMMAM R'IRHA, 179.

Thermal Baths: Terms moderate.

Grand Hôtel des Bains (lately taken over by the Crédit Foncier), good.

A *public conveyance* meets trains at Bou Medfa. 2 f. each person. (For private carriage 15 f.; write beforehand.)

Mules and donkeys can be hired at the hotel.

HAMMAM SIDI ABDELI, 278.

HAMMAMET, 308, 325.

Brit. Cons. Agent, A. Cacchia.

HAMMAMET, gulf of, 326.

HAOUCH BOU-KAN-DOURA, 173.

HARAT EL-KEBIRA, 334.

HARAT ES-SOGHEIRA, 334.

HARRAOCH, river, 150, 176.

HASSEN-BIN-ALI, 159.

HAUSSONVILLERS, 153.

HENCHIE HAMMAM DAR-RAJJI, 312; ruins of, 313.

HENNAYA, 292.

HERBILLON, 122.

HIGH PLATEAUX, THE, 14, 17, 152, 268, 289.

HIPPODROME, 173.

HIPPONE, anc. **UBBO**, 124.

HODNA, mountains, 18, 174.

HONAI, 292.

HOUMT AJIM, 334.

HOUMT-ES-SOUK, 334.

HUSSEIN DEY, 164, 175.

HYDRA, ruins of, 241.

I

IBADHI sect, 12.

ICHERRIDHEN, 156.

IGHIL ALI, 257.

IGHZER-AMOKRAN, 215.

IGLI, 13, 294.

ILE TAKOUCH, 122.

INKERMAN, 184, 186.

IRIL, 168.

ISHKUL, Lake of Mount, 136, 314.

ISSER, river, 165, 173, 278; gorge, 165, 268, 278.

ISSEVILLE, 153.

Hôtel de l'Étoile.

J

JAMĀĀ SIDI MAHREZ,
mosque, 301.
JARDIN D'ESSAI, 107,
108.
JEBEL; *see* Djebel.
JEBEL AMOUR, 19.
JEMMAPES, 128.

K

KABYLE LANGUAGE, 12.
KABYLES, THE, 7.
**KABYLIA OF DJURD-
JURA**, excursion through,
154.
KAID HASSEN, borj,
212.
KAID MANSOUR, borj,
211.
KAIDS, 9.
KALĀĀ (GELĀĀ), 256.
KALĀĀT ES-SANAN, hill,
242.
KALAMA, 208.
KAMART, 307.
KAMETA, 136.
KAOUA, ruins at, 186.
KAPOUDIAH, 331.
KARGUENTAH (ORAN),
189.
KARKAR HILLS, 14.
KASR BAGHAI, ruins of,
248, 249.
KASR BINT-ES-SULTAN,
182.
KASR EL-AHMER, 243.
KASR EL-MAHDJOUBA,
208.
KASR EL-MENARA, 325.
KASR ES-SAID, the, 308.
KASR KELEBIA, the, 325.
KASR TEMOUCHENT, 172.
KASR ZEITOUN, 317.
KBOUR-EL-ABBAS, 226.
KEF CHETOB HILL, 316.
KEF DJEMEL, forest, 309.
KEF OM-ET-TEBOUL,
316, 317.
KEF; *see* El-Kef.
KEF-EL-AKHDAE, 231.
KEF ER-RAKHM, 243.
KEF KERICHEFA, tunnel,
309.

KEF OUM-ET-TEBOUL,
131.

KEF SIDI OMAR PEAK,
182.

KELEBIA, 325.

Brit. Cons. Agent, F.
Conversano. *No hotel.*

KERKENA ISLANDS, 331.

KEROUAN, 320, 324, 326,
330, 335, 336, 337, 338,
339.

The railway now ex-
tends all the way from
Tunis to Kerouan, *via*
Sousse.

Hôtel Splendid (F.
Mauras, proprtr.), good,
10 f. wine included; *Hôtel*
de France.

See Susa (or Sousse).
El-Barota, well, gates
of, 338; mosque of, 337,
338; Jemaat es-Sahebi,
the, 338; cemetery, the,
339.

KEROUIA, forest, 188.

KEZZAS, 294.

KHAMISA, 242, 245, 246.

	PAGE
Baths	246
Palace	245
Ruins of ancient city .	245
Theatre	245
Tombs	246
Triumphal Arch,	
Basilica	245

KHARATA, 169, 211.

Hôtel du Chabet, primi-
tive, but clean; bargain.

KHEKAR, 226.

KHERBEL - EL - BORDJ,
227.

KHOMAIR, country of, the,
315.

KHOMAIR, mountains,
318.

KHOOSHADA, 242.

KHROUB, 249; *see* Le
Khroub.

KIRBA, 259.

KLEBER, 285, 286.

KOLEA, 147.

Hôtel de Paris. Omni-
bus from K. to Blidah,
150.

KOUBBA, village of, 108;
ecclesiastical college at,
108.

KOUDIAT HERAOUI, 266

KOUDIAT ZAROUB, hill,
140.

KOULOUGLIS, the, 11.

KRALPALLAH, 290.

KRISTEL, 194.

KSOUR-ES-SIF, 330.

KSOURS, oasis, 13.

KUBLEYEH, 339.

L

LA CALLE, 128, 242,
316, 317.

Hôtel d'Orient.

Diligence daily to and
from Bône. Carriage
road to Aïn-Draham and
on to the Tunisian rail-
way.

	PAGE
Coral Fishery	128
History	128

LA CHIFFA, 158, 178.

Railway open to Médéa.
Café de la Gare. Good
meals may be had.

LA CHIFFA, gorge of, rail-
way now open to, 158,
178.

LA CHIFFA, river, 158.

LA DJIDIIOUIA, 186.

LA FERME, 259.

L'AGHA, 109, 164, 175.

LA GLACIÈRE, farm, 177.

L'ALMA, 165.

Hôtel d'Orient.

LA MACTA, 286.

LA MARE D'EAU, 189.

LA RASSAUTA, 112.

L'ARBAL, 189.

LA REGHAÏA, 165.

LA RÉUNION, 214.

LA SENIA, 189, 194, 277.

LA VERDURE, 309.

LALIA, oasis, 228.

LALLA MARNIA, 279,
280.

Hôtel de France, ex-
cellent.

LAMBESSA, ruins at, 208, 218.

LAMORICIÈRE, 267, 283.

Hôtel de l'Univers.

Arab Market on Monday.

LADY KHADIDJA, shrine of the, 168.

LAURIERS ROSES, stat., 281.

LAVARANDE, 181.

LE BARRAGE, 182, 287.

L'HABRA, 188.

L'HILLIL, 187.

LE KR OUB, 173, 208.

Hotel Victoria, close to the railway station. A great convenience for those who wish to break their journey at this place. Junc. for Bône and Tunis.

LE PONT D'ISSEB, 278.

LE ROCHER, 282.

LE TLELAT, river, 189.

LELLA SETTA, mountain, 268.

LES ARIBS, 181.

LES ATTAPS, 181, 182.

LES CINQ PALMIERS, 259.

LES DEUX FRÈRES, 293.

LES FRÈNES or **EL BETHOM**, 173.

LES ISSERS, river, 153.

LES LACS, 216.

LES SALINES, 186.

LES TAMARINS, 226.

LES TREMBLES, 173.

LES TROIS MARABOUTS, 291, 292.

LES TROIS PALMIERS, 259.

LES TROIS RIVIÈRES, 279.

LODI, 158.

LOLLIUS, tomb of, 209.

L'OUGASSE, 189.

LOURMEL, 277.

M

MĀALAKA, cisterns, 305, 306.

MĀALKA, 321.

MAOTA, river, 14.

M A D A U R A, 310; see Mdaourouch.

MADID, 175.

MAFRAG, river, 128.

MAGARAN, 323, 324.

MAGENTA, 288, 284.

MAGHAÏER, 231.

MAHADIA, 328, 330.

Brit. Cons. Agent, C. Violante. No hotel.

MAHADJIBA, ruins, 208.

MAHMEL, mountain, 256.

MAHOUAN, 171.

MAILLOT, 157, 168.

Hôtel Bossier, poor. A road, practicable in summer, over the Col de Tirourda to Fort National.

MAISON BLANCHE, LA, 165.

MAISON CANTONNIÈRE, 280.

MAISON CARRÉE, LA, establishment of White Fathers, 111, 164, 176.

MANOUBA, plain of, 322.

MANOUBA, the, 308, 315.

MANSOURA, 169, 269, 274, 276, 278, 279.

MANSOURA, hill, 200.

MARABOUTS, LES TROIS, 291, 292.

MARABOUTS, THE, 16.

MARENGO, 138, 179.

Hôtel de Marengo. Steam tramway to El-Affroun. Carriages can be hired for Tipasa and the Tombeau.

MARKOUM, 290.

MARKOUNA, ruins of, 219.

MARSA, the, 306, 307.

MASCARA, 263, 267, 279, 285, 286, 287, 288, 289.

Grand Hotel, fairly good; *H. du Louvre*.

Branch railway to main line.

Diligence to Oran by night, 12 hrs., 12 f. To Frença, 13 hrs., 10 f. To Sidi Bel Abbès (see Rte. 26).

MATEUR, now joined to Tunis by railway, 314.

MATIFOU, 113.

MAZAFRAN, river, 147, 178.

MAZAGRAN, 262.

MAZOUNA, 184, 185.

MDAOUROUCH, 233, 242, 243, 244, 245.

MÉCHÉRA-SFA, 263.

MÉCHERIAH, 290.

MÉGHTA EL-ARBI, 172.

MEDABIAH, the, 163.

MÉDÉA, 158.

Accessible by railway. *Hôtel d'Orient*; *Hôtel Louis*.

Mules can be hired.

Arab Market on Tuesday.

MÉDÉA, aqueduct, 159.

MÉDIOUNA, hills, 14.

MEDJANA PLAIN, 170, 171.

MEDJERDA, river, 136, 233, 295, 310, 311, 313, 314.

MEDJEZ-AMAR, 253.

MEDJEZ-EL-BAB, 314.

MEDJEZ-SFA, 309.

MEDRASSEN, monument, 216.

MÉFESSOUR, 285.

MEGALITHIC REMAINS, 241, 252, 263, 322.

MEHEDIA, 330, 331.

Hôtel de France, fairly good.

British Cons. Agent, G. Violante.

MEKALIA, 262.

MEKALIS, 290.

MEKERRA, river, 282, 283.

MEKLA, 154, 155.
Hôtel Eglin, poor.

MELAB-EL-KORAN, 173.

MELAGOU, plain, 226.

MELIKA, 163.

MÈNERVILLE, 153, 165.
Hôtel Blanchard.

MENZEL, 328, 332.

MENZEL-BOU ZALFA, 308.

By rail from Ham-
mam-Lif, on the Tunis-
Nebeul line.

MENZEL TEMIM, 325.

MERABET EZ-ZEIDJ, the, 281.

MERCIER-LACOMBE, 279.

MERDJA, 184.

MERS-EL-KEBIR, 194.

MERSA ED-DEJAJ, 165.

MERSA HONAI, 292.

MERSA TOUMLILIN, 114.

MESKIANA, 233.

MESLOUG, 170.

MESOUBIA, caravanserai,
173.

MESSAOUD, 171.

METIDJA, 14, 150, 158;
plain, 94, 176.

METLIL, 162.

MEZA BERZIG, 231.

MICHELET, formerly
called *Ain-el-Hammam*,
157.

Hôtel des Touristes,
fair.

MIDOUN, 334.

MILA, 118.
Hôtel du Commerce,
fair.

Reached by diligence
from Constantine or
Djidjelly.

MILIANAH, 180.

Hôtel de Commerce,
good.

Reached by omnibus
either from Adalia or
Affreville, stations on
railway.

Barracks, Military PAGE
Hospital . . . 181
Church, Koubba of . . . 181
Sidi Moh-ben-Yussef . . . 181
Environns . . . 181
History . . . 180

MILLESIMO, 254.

MINA, river, 14, 186, 262,
263, 285.

MIRA, 155.

MIRABEAU, 154.

MISSERGHINE, 277.

A fairly good inn.

MODZBAH-SFID, 290.

MOGHRAR FOUKANI,
290.

MOGHRAR TAHTANI, 290.

MOHAMMED ED-DIBBAH,
KOUBBA OF, 165.

MOHAMMEDIA, plain of,
322.

MOHAMMEDIA, ruined
palace, 320.

MOKNINE.

Railway from Susa
(2 trains daily); 2½ hrs.

MOKTA EL-HADID (Ain-
Mokra), ironworks, 291.

Railway from Bône.

MOKTA EL-OUST, 162.

MOLOUIA, river, 13, 294.

MONASTIR, 330.

Brit. Cons. Agent, F.
Portelli.

No hotel.

MONDOVI, 255.

MONTAGNAO, 292.

MONTAGNE DE SEL, 227.

MONTAGNE GRISE, 285.

MONTAGNE ROUGE, 261.

MONTENOTTE, 259.

MONTE ROTONDO, 316.

Moors, 11.

MORSOTT, 233.

MOSTAGANEM, 186,
260, 262.

Hôtel de France, fairly
good. *H. des Messageries*.

Railway to Tiarret,
crossing the main line
at Relizane.

Diligences: To L'Hil-
lil 3 times a day, 4 hrs.,
4 f. To Perrégaux, 4
hrs., 3 f. To Oran, 10
hrs., 8.15 f. To Cas-
saigne, 7 hrs., 3 f.

MOULIN RANDON, mega-
lithic tombs at, 161.

MOUNT ISHKUL, lake,
136, 314.

MOUZAÏA LES MINES,
158.

MOUZAÏA, PIC DE, 178.

MOUZAÏAVILLE, 178.

MTALSA, 289.

MUKTAR, 320.

MULAI ABD-EL-KADER,
village, 279, 282.

MULAI ISMAÏL, forest,
189, 287.

MUSTAPHA INFÉRIEUR,
109.

**MUSTAPHA SUPÉRI-
EUR**, 106 (for *Hotels* see
Algiers in Index).
English Club and Golf
Club near the Governor's
palace.

M'ZAB COUNTRY, 163.

MZITA, 169.

MZOURI SALT LAKE,
216.

N

NAÂMA, 290.

NADOR, spur of, 159, 254.
NAZREG, 289.

NEBEUL, 308, 325.

Railway to Tunis.

NEBEUR, 318.

NEDROMA, 280.

NEDROMA, plains of, 280.

NEGRIER, 278.

NEGROES, 12.

NEKMARIA, 261.

NEMOURS, 279, 281,
292, 293.

Hôtel de France, fairly
good.

N'GOUÇA, the, 18.

**NOTRE DAME D'AF-
RIQUE**, 111.

NOVI, 146.
NUMIDIAN MARBLE QUAR-
RIES, 285.

O

OMAR, 167.

OMAR-DRA-EL-MIZAN,
 station for Omar and
 Dra-el-Mizan, 167.

OMM-EL-ASHERA, 225.

OMM-EL-BOAGHI, 247.

ONYX, ALGERIAN, 278.

See also Alabaster.

ORAN, 189, 271, 277,

286, 291, 293. PAGE

Churches, Mosques . . . 192

Citadel, Forts . . . 193

Environs . . . 194

Gates . . . 193

History . . . 190

Hospitals, Negro Quar-

ter . . . 193

Population . . . 190

Situation, Harbours . . 191

Subterranean Galleries 193

Theatre, Museum . . . 192

Trade . . . 192

Hotels: *Continental,*

excellent. *H. de la Paix.*

H. de l'Univers.

Restaurant: Café de

Létang.

British Vice-Consul:

Thomas Barber, Esq.

U.S.A. Cons. Agent:

B. A. Courcelle, Esq.

French Baths: Boule-

vard Oudenot.

Moorish Baths: Rue

de la Mosquée.

Carriages have all

their scale of charges.

Boats: The charge

for landing is 50 c. for

each passenger, and 40 c.

for each package.

Means of Communi-

cation by Sea: A.

Compagnie Générale

Transatlantique. Leaves

Marseilles for Oran,

Thur. and Sat., 5 P.M.

Leaves Oran for Mar-

seilles, Tues. and Thur.,

5 P.M.

Leaves Oran for Car-
 thagena, Mon., 11 P.M.,
 returning, Tues., 8 P.M.

B. *Comp. de Navig.*
Mixte.

I. Leaves Marseilles,

Wed., 6 P.M.; touches

at Cette and Port Ven-

dres; arr. Oran, Sun.,

3 P.M. Returns from

Oran, Sat., 9 P.M.;

touches at same ports;

reaches Marseilles, Wed.,

5 A.M.

II. Leaves Oran, Mon.,

12 P.M. Arr. Arzeu,

Tues., 3 A.M., Mostag-

anem, 2 P.M. Returns

to Oran, Wed., noon, and

arrives Wed., 4 P.M.

III. Leaves Oran, Sun.,

8 P.M., touches at Ne-

mours and Melilla, and

reaches Tangiers, Wed.,

4 A.M. Returns from

Tangiers, Wed., noon;

reaches Oran, Fri., 6 A.M.

C. *Transports Mari-*

times à Vapeur. Leaves

Marseilles for Oran, Tues.

and Fri., 5 P.M. Returns

from Oran to Marseilles,

Tues., 9 A.M.

ORAN, department of, 14.

ORAN, short tour in, 114,

278.

ORAN, THE SEBKHA OF,

277.

ORLÉANSVILLE, 183,

186, 259.

Hôtel de Commerce, fair;

Hôtel de France, indif-

ferent.

Markets: Saturday

and Sunday.

Omnibus to Ténès

daily, 5½ hrs., 6 f.

Carriage to Ouaran-

senis, 20 f. per diem.

OUARANSÉNIS, 184.

OUARANSÉNIS, peak,

152, 182.

OUAROE, 245.

OUARGLA. See Addenda.

OUARIZANE, 185.

OUARIZANE, river, 185.

OUASSEL, river, 17.

OUDENA, ruins of, 307,

322, 323.

OUED ABDI, 225, 227.

OUED ACHÉBOUR, 174.

OUED AGRIOUN, 212.

OUED AKBOU, 213.

OUED AKKAL, 174.

OUED ALFOU, barrage,

280.

OUED AMAZIN, 214.

OUED AMMIN, 128.

OUED AMISEUR, 214.

OUED ANNOUNA, 252.

OUED AROUSA, 184.

OUED ATMENIA, 172.

OUED BARBATA, 279.

OUED BATNA, 217.

OUED BELLAH, 144.

OUED BENI MELEH, 122.

OUED BENI MESAOU, D,

213

OUED BENI MESSOUS,

110.

OUED BENIAN, 167.

OUED BERRI, 167.

OUED BISKRA, 227, 228,

229.

OUED BOU DJEMAA, 255.

OUED BOU HAMDAN,

253.

OUED BOU KOTAN, 169.

OUED BOU MENDJIL,

187, 188.

OUED BOU-SAADA, 174.

OUED BOU ZAINA, 225.

OUED BOUKTENA, 160.

OUED CHABBO, 233, 235,

310.

OUED CHAHAM, village,

309.

OUED CHELLAL, 175.

OUED CHERF, 250, 253.

OUED CHOUK, 233.

OUED CHOULY, village,

268.

OUED CORSO, 165.

OUED DAMOUS, 147.

OUED DJEDI, 19.

- OUED DJEMAA, 156, 173, 213.
 OUED DJER, 178, 179.
 OUED DJIDILOUA, 186.
 OUED EDOUS, 167.
 OUED EL-ACHAR, 311.
 OUED EL-HACHEM, 144.
 OUED EL-HAMMAM, 169.
 OUED EL-HAMMAM, village, 287.
 OUED EL-KEBIR, 118, 132, 177, 178, 209, 316.
 OUED EL-KHAMZA, 195.
 OUED EL-KHEIR, village, 262.
 OUED EL-MELAH, 311, 333.
 OUED ES-SAHEL, 157, 168, 170, 213, 256, 257, 258.
 OUED EZZAN, 132.
 OUED FEDALA, 226.
 OUED FEKAN, 279.
 OUED FERGOUG, barrage, 188.
 OUED FODDA, village, 182.
 Hôtel de la Gare, poor.
 Carriage may be had for Barrage. 2 hrs., 10 f.
 OUED FRARAH, village, 254.
 OUED FRECHIE, 261.
 OUED GHAGHAR, 19.
 OUED GHEIR, 13, 18, 19, 231, 232, 294.
 OUED GHEIR, plain, 18.
 OUED GILMA, 339.
 OUED GOUSSIMET, 211.
 OUED GUELT EL-KILAB, 276.
 OUED HABRA, 285, 286, 287.
 OUED HAKOUM, 160.
 OUED HAMMIM, 173.
 OUED HOUNET, 279.
 OUED ILLIL, 187.
 OUED IMBERT, 282.
 OUED IMBERT, station, 282.
 OUED KALIA, 271, 272.
 OUED KANTARA, 227.
 OUED KERMA, 317.
 OUED KHAMIS, 112.
 OUED KHELLOUG, village, 262.
 OUED KISS, 13, 294.
 OUED KSOUR, 226.
 OUED LAIA, 327.
 OUED LALLA OUDA, 184.
 OUED MACTA, 189, 286.
 OUED MAGHIR, 256.
 OUED MAGOUN, 286.
 OUED MALAH, 188, 277, 268.
 OUED MAREGH, 169.
 OUED MASSIN, 151.
 OUED MELAH, 161, 173, 309.
 OUED MELIAN, 321, 322.
 OUED MELIZ, 311.
 OUED MELLEQUE, 233, 243, 310, 313, 318.
 OUED MELRIE, 279.
 OUED MERDJA, 174.
 OUED MESKIANA, 235.
 OUED MESSELMOUN, 146.
 OUED MESSIDA, 316.
 OUED MIA, 18, 19.
 OUED MOUGRAS, village, 310.
 OUED MOULA, 280.
 OUED MSAOURA, 294.
 OUED MUNGOUN, 233.
 OUED NADOR, 139.
 OUED RIGHA, 122.
 OUED RIOU, 184.
 Station for Inkerman.
 Hôtel d'Inkerman, fairly good.
 Diligences daily to Ammi Mousa (N.), and Renault, in the Dahra (S.)
 OUED ROUINA, 181.
 OUED ROUMMEL, 202.
 OUED SAF-SAF, 195.
 OUED SAIDA, 289.
 OUED SARNA, 282.
 OUED SBETLA, 340.
 OUED SEBT, 146.
 OUED SEDEUR, 161.
 OUED SEGHIR, 116.
 OUED SELLAM, 256.
 OUED SENAN, 277.
 OUED SFA, 309.
 OUED SHERBA, 169.
 OUED SI SLIMAN, 184.
 OUED SLY, 184.
 OUED SMAR, 164.
 OUED SMENDOU, 195, 209.
 OUED SOUMAM, 213.
 OUED TAGA, 225.
 OUED TAGHIA, 182.
 OUED TAZA, cave of, 119.
 OUED TEPKHASID, 325.
 OUED TEMDA, 185.
 OUED TEMOUCHENT, 277.
 OUED TERZOUG, 188.
 OUED TESSAA, 313.
 OUED TIFERA, 214.
 OUED TIFESH, 244.
 OUED TIMETLAS, 290.
 OUED TINJA, 136.
 OUED TINN, 286.
 OUED TLÉLAT, 280.
 OUED TOUDMAN, 288.
 OUED TRARIA, 279, 288, 289.
 OUED ZAIAM, 167.
 OUED ZARGAA, 313, 314.
 OUED ZENATI, village, 250.
 Buffet at station, *Hôtel de France* in village.
 A service of diligences daily to Ain-Beida, 8 a.m.
 OUED ZENATI, 209, 250, 253.
 OUED Z'HOUE, 120.
 OUJDA, 13, 294.
 OULAD ABD-EN-NOUR, 171.
 OULAD AISSA, 256.
 OULAD ALI, 281, 282.
 OULAD BOU-ALI, 168.
 OULAD HAMADOOSH, 256.
 OULAD MIZIAN, 185.
 OULAD NAÏL, mountains, 174. Women of, 228.
 OULAD OU-KASAI, 154.
 OULAD RAHMOUN. Junction for Ain-Beida, 172.
 OULAD RIAH, caves, 261; tragedy in, 261, 262.
 OULAD SEAD, 211.
 OULAD SIDI CHEIKH, 13, 291.

OULAD SIDIEL-AKH DAR, 185.
OULAD SI MOUSSA, 245.
OUMACH, oasis, 230.
OURLANA, oasis, 231.

P

PALESTRO, 165.
Hôtel de Commerce.
 Terrible tragedy at, 165.
PALMIERS LES CINQ, 259.
PALMIERS, LES TROIS, 259.
PÉLISSIER, 262.

PERRÉGAUX, 188, 279, 287.

Junction for Saïda and Arzeu.

Hôtel des Colonies, tolerably good. At Mascara Station, *Hôtel des Voyageurs*, good. *Carriage* to the Barrage of Oued Fergoug, 6 f.

Arab Market on Thursday.

PERRIN, 283.

PETIT, 254.

PETITE PORTE, 169.

PHILIPPEVILLE, 120, 195.

	PAGE
Harbour . . .	120
City . . .	121
Archæological Treasures . . .	121
Ancient Baths . . .	122

British Vice-Consul, Herbert Scratchley, Esq. *Grand Hôtel*, fairly good.

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PHOSPHATE QUARRIES, 240.

PITON, D'AKBOU, 215.

PITON DU DAKLA, 159.

PLATEAU GALBOIS, 118.

PLATEAUX, the High, 14, 17, 152, 268, 289.

POINTE PESCADE, OR MERSA - ED - DEBBAN, 110.

POLLASTRO, island, 133.

PONT DE CHÉLIFF, 261.

PONTÉBA, 183.

PORT AUX POULES, 286.

PORT-GUEYDON, 115.

PORTES DE FER, LES, 168, 256.

PORTO FARINA, lake, 136.

POUDRERIE GARDEN, 203.

PRÆCILIVS, TOMB OF, 202.

R

RACHGOUN, 276, 291, 292.

RADES, 308.

RAMLEH, island, 331.

RANDON, 255.

RAS ADAR, 325.

RAS ADDAR, 136.

RAS DIMAS, 330.

RAS EL AÏN, stream, 194.

RAS EL-AKBA, 253.

RAS EL HADID, 122.

RAS EL KEBIR, 120.

RAS EL-MA, 172, 284.

RAS EZ ZEBIB, 136.

RAS KHADIDJA, 331.

RAS SIDI ALI EL-MEKHI, 136.

RAS TAKOUCH, 122.

RAVIN DU VOLEUR, 180.

RELIZANE, 186, 260, 262, 285, 288.

Junction for line from Mostaganem to Tiaret.

Buffet, good. *Hôtel de la Gare*, fair.

REMCHI, 292.

RENAULT, 184, 185, 261.

RIO SALADO, river, 277.

ROBERTVILLE, 195.

A diligence daily to Collo.

ROCHER DE SEL, LE, 161.

ROKNIA, 252.

ROMANAQUEDUCTAT Tunis, 307, 320.

ROMRI, 188.

ROUGA, ruins of, 330.

ROUBA, 165.

ROUINA, 181.

ROUMADIA, mountain, 120.

ROVIGO, 150.

RUISSEAU DES SINGES, 158, 178.

RUSGUNIA, ruins of, 112.

RUSUBESER, 115.

S

SÅADA, 230.

SAF-SAF, gardens at, 122

SAF-SAF, river, 275, 278, 280, 283.

SAF-SAF, stat., 195.

SAHARA DESERT, 14.

SAHARA, upper and lower, 18-20.

SAHEL, the, 176, 295.

SÅIDA, 279, 288, 289.

Hôtel de la Kantara.

- SAINT AIMÉ**, 186.
 Barrage of La Djidiouia,
 4 kil.
Café de la Lyre, food
 procurable.
- SAINT ANDRÉ**, 194.
- SAINT ARNAUD**, 172.
- SAINT BARBE DE TLÉ-
 LAT**, 281.
- SAINT CHARLES**, 195,
 252.
- SAINT CYPRIEN DES
 ATTAPS**, 181.
- SAINT DENIS DU SIG**,
 188, 282, 287.
Hôtel de Muscara, poor.
- Carriage to Barrage of
 Cheurfa*, 21 kil., 15 f.
- SAINT DONAT**, 172.
- SAINT EUGÈNE**, 110.
- SAINT GÉROME**, 194.
- SAINT JOSEPH**, 254.
- SAINT LEU**, 286.
- SAINT PIERRE**, 279.
- SAINT REPARATUS**, ba-
 silica of, 183.
- SAINT SALSA**, basilica of,
 140.
- SAINTE BARBE DE
 TLELAT**, 189.
*Junction for Sidi-bel-
 Abbès, Tlemçen, Ras-el-
 Ma.*
Hôtel de la Gare, toler-
 able.
- SAINTE CLOTILDE**, 194.
- SAINTE LÉONIE**, ravine,
 285.
- SAINTE LÉONIE**, village,
 286.
- SAINTE MONIQUE**, 182.
- SAKAMODI**, 173.
- SALAH BEY**, oasis, 203.
- SALINES, LES**, 186.
- SALLECTA**, 329, 330, 331.
- SALOMON DE MUSIS**, 116
- SALTO DEL CAVALLO**,
 194.
- SANEDJA**, river, 122.
- SBEITLA**, 389, 340.
- SCHOOLS, FRANCO-KA-
 BYLE**, 156.
- SEBĀA ROUS**, the, 152,
 160.
- SEBAKH**, zone, 171.
- SEBAOU**, gorge, 155.
- SEBAOU**, river, 154, 165.
- SEBDOU**, 269, 276, 284.
Hôtel de Commerce.
- SEBKHA**, 167.
- SEBKHA ES SEDJOURMI**,
 lake, 138, 320.
- SEBKHA**, of Oran, 277.
- SEBKHA ZAHREZ**, salt
 lakes, 161.
- SEDDOUK**, 214.
- SERIANA**, oasis, 229.
- SERSOU**, 17, 152, 153.
- SETIF**, 170, 211, 216,
 224, 308.
Buffet at station.
Hôtel de France, large
 rooms and electric light,
 but sanitary arrange-
 ments imperfect; *H.*
d'Orient.
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 vide carriage for 2 per-
 sons for Bougie in 2
 days, 100 f.; for 3 to
 4 persons, 120 f. The
 same in one day, 110 f.
 and 150 f.
- Arab Market*, Thurs.
- SEYBOUSE**, river, 124,
 244, 250, 253, 254, 309.
- SFAK**, 381, 332.
- Brit. Vice-Consul**,
 Joseph Leonardi, Esq.
Hôtel de France; *H.*
Transatlantique, both
 poor.
- SI EL - HADJ AISSA**,
 koubba, 162.
- SIMOH. BIN NASIR**, tomb,
 213.
- SI SLISSEN**, 283.
- SIDI ABD-EL-KADER**,
 El-Djilani, koubba of,
 178 262.
- SIDI ABD-EL-KADER**,
 tomb of, 259.
- SIDI ABD-ER-RAHMAN**,
 Zaouia of, 240.
- SIDI ABDULLA**, Maison
 Cantonnière of, 280.
- SIDI ABID**, marsh, 184.
- SIDI AHMED EL-KEBIR**,
 koubba of, 177.
- SIDI AICH**, 214.
- SIDI AISSA**, caravanseraï,
 174.
- SIDI, AKKACH**, koubba
 of, 122.
- SIDI ALI BEN AHSAN**,
 shrine of, 320.
- SIDI ALI BIN-YOUB**, vil-
 lage, 283; hot springs,
 283.
- SIDI ALI MAKADAM**,
 marabout of, 325.
- SIDI BADER**, 310.
- SIDI BEL ABBÈS**, stat.,
 282.
- SIDI BEL ABBÈS**, town,
 275, 279, 281, 282,
 283.
- Hôtel Continental*,
 good.
- SIDI BEL HASSAN**, hill,
 297.
- SIDI BEL HASSAN**, tomb
 of, 301.
- SIDI BEL KHAIR**, mara-
 bout of, 281.
- SIDI BERAFOR**, marabout
 of, 281.
- SIDI BIN TAIB and SIDI
 SALAH**, marabouts of,
 281.
- SIDI BOU JUBAR**, koubba
 of, 318.
- SIDI BOU-MEDIN**, tomb,
 272, 273.
- SIDI BOU-SÂID**, 302, 307.
- SIDI BOU ZAIN**, salt lake,
 186.
- SIDI BRAHIM**, stat., 233,
 281, 282.
- SIDI EL HANI**, Sebkhah of,
 335.
- SIDI EL-HEMESSI**, 310.
- SIDI FERUOH**, or FUR-
 RUJ, 109.

SIDI FOUATI, 116.
SIDI HAMANA, Zaonia of, 172.
SIDI HACHELAF, shrine of, 323.
SIDI KHALID, 283.
SIDI KHALIFA, 290.
SIDI-KHELIL, oasis, 229.
SIDI-KHELTAB, 262.
SIDI KHURFASH, marabout of, 325.
SIDI LAHSEN, 283.
SIDI MAKLOUP, 162.
SIDI MAKLOUP, koubba of, 162.
SIDI MAMMAR BIN-MOKHALA, tomb of, 259.
SIDI MEQID, 201.
SIDI MERZOUG, koubba of, 318.
SIDI MESKINE, 312.
SIDI MOHAMMED, marabout of, 281.
SIDI MOH. BIN AOUDA, 262.
SIDI MOUSSA, 150, 173.
SIDI MUSTAPHA, marabout of, 325.
SIDI NAAMAN, koubba of, 107.
SIDI OKBA, oasis, 229.
SIDI OKBA, shrine, 230.
SIDI RAQHID, oasis, 231.
SIDI RAIHAN, 213.
SIDI SALIM, ravine, 289.
SIDI SLIMAN, forest, 139.
SIDI YAHIA, tomb of, 172.
SIDI ZEHILI, 313.
SIG, river, 14, 189, 285.
SIGA, 280.
SIGUS, ruins of, 247.
SILA, 247.
SNASSEN, mountains, 280.
SOFS, THE, 16.
SORELLE ROCKS, 133.
SOUP, 13, 18, 231.
SOUK AHRAS, 233, 242, 247, 309, 310, 320.
 Junction for **TEB-ESSA**.
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fair. Bed 3 f., petit déj. 1 f., déj. 8.50 f., din. 3 f.; *H. Victoria*.
Buffet at station.
SOUK-EL-ARBA (Fort National), 155.
SOUK-EL-ARBÄÄ (Tunisia), 312, 313, 316, 317, 318.
Hôtel de Commerce.
Diligence to El-Kef.
SOUK EL-DJEMÄÄ, 153, 320.
SOUK EL-HAAD, 165.
SOUK EL-KHAMIS, 313.
SOUK EL-MITOU, 262.
SOUMA BINT-EL-ABRI, 241.
SOUMAH, iron mines, 176.
SOUMAR, 258.
SOUMAT-EL-KHENEG, 241.
SOUR DJOUAB, 174.
SOUE GHOZLAN, 173.
SRIGINA, island, 120.
STAOUËLI, battle of, 109; plain, 109; la Trappe, 109; Nôtre Dame de, 109.
STORA, 120, 122.
SUPETULA, 339.
SUSA, or **SOUSSE**, 324, 325, 326, 335, 336, 339.
 Brit. Vice-Consul, William Galea, Esq.
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 There is a line to

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EXCURSION FROM Sousse to El Djem.

A carriage with 4 horses can be obtained for 25 f. a day (*i.e.* 50 f. for the journey there and back). The traveller should take lunch with him for the journey. At El Djem he will find all he requires at the *School-house*, where he can spend the night, if notice is given beforehand. Good road all the way for bicycles.

	PAGE
Gates	327
History	326
Population	326
The Bab el-Gharbi	327
The Kaaba	326
The Kaar er-Ribat	327
The Morestan	327

SYRTIS, the lesser, 331, 334, 335.

T

TA-BABOET, mountain of, 115; ascent of, 119, 212, 258.
TA KIROUNT, col de, 211.
TABARCA, island of, 181, 312, 315, 316, 317; history, 131.
TABIA, 283.
TABLAT, 173.
TADMITZ, forest of, 161.
TAFAROUA, 289.
TAFILALET, oasis, 13.
TAFNA, river, 14; source of, 276, 279, 280, 291, 292.
TAGASTE, 310.
TAGDEMPT, or **TAK-DEMPT**, 265.
TAGEMSDETT, forest, 280.
TAGHIT, mercury mines, 225.
TAGRAMAET, fortress, 267.

TAGHART, 268.
TAKENBRIT, ruins of, 292.
TAKRIETS, 214.
TAKSEBT, 115.
TALET MIZEB, 155.
TAMALOU, 120.
TAMDA, 155.
TAMERNA, 231.
TAMGOUT LALLA KHADIDJA, DJ., 156, 168, 258.
TAMOUDA, 154.
TAOURA, 242.
TAOURIRTE, 168.
TARIK EL-DJEMIL, the, 335.
TARJA, 310.
TATAHOUNE, 335.
TATEN-YAYA, 284.
TAXAS, 247.
TAZAGARET, 294.
TAZMALT, 215, 257.
Hôtel des Voyageurs.
TAZOUT, ravine, 285.
TEBESSA, 171, 233, 234, 235, 241, 242, 249, 313, 336.
 By rail from Souk Ahras.

	PAGE
Basilica	237
Forum	237
Gates	235
History	234
Monastery	237
Roman Aqueducts	240
Roman ruins	240
Temple of Jupiter	235
Triumphal Arch of Caracalla	236

Hôtel d'Orient, primitive, but clean beds.
Grand Hotel.
Tebessa, plain of, 242, 310.
TEBOURBA (Teburbo Minus), 314.
TEBOURSOUK, 246.
TELAGH, 283.
TELEGGMA, 172.
TELL, watershed of, 15.
TELL, zone, 171, 295.
TEMACIN, 232.
TEMOULGA, 182.
TENERA, 283.

TÉNÈS, 259, 260, 269.
Hôtel de la Poste, poor.
TENIET-EL-AHD, 151, 180, 181, 267.
Hôtel de Commerce, good.
 CEDAR FOREST, 151.
TENIET-EL-GUETRAN, 152.
TERNATEN, 266, 267.
TERNY, 276.
TESTOUR, 314.
THAYA, 250.
THESSALAH, mountain, 282.
THEVESTE; see Tebessa.
THIEBS, 167.
THIERSVILLE, 289.
TIARET, 186, 260, 262, 263, 265, 266, 267, 288, 289.
 Railway to Relizane and Mostaganem.
Hôtel de Commerce, in the fort, inconveniently situated. *Café d'Orient*, in the new town, close to post and diligence station, better; neither very good, but will no doubt be improved as Tiaret becomes more known.
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 Carriage to Djedars, 20 f.
 Arab Market, Monday.
TIBLIS, ruins of, 250, 251, 252.
TICHY, 213.
TIDERNATIN, plateau, 289.
TIFESH, 242, 243, 244, 245.
TIFLÈS, plain, 283.
TI-FILKOUTH, river, 258.
TIGHAOUT, river, 184.
TIGZIRT, ruins of, 115.
TIJDDI, 260.
TIKLAT, 214.
TILI-JOUEN, mountain, 258.
TILIOUANET, 188.

TIMEGAD, ruins of, 217, 218.
Hôtel des Étrangers in Batna has now a branch here, which is a great convenience to travellers.
 The **Museum** is now open to the public.
TIMETLAS, 289.
TIMMOUN, 294.
TINSILT, salt lake, 216.
TIOUT, oasis of, 290.
TIPASA (of Algiers), 139.
Hôtel du Rivage, good.
 An excursion to Tipasa can be made in five hours by railway, steam tramway, and carriage. Roman ruins at, 139-144.
TIPASA (of Constantine), 244.
TIRILTE, 168.
TIROURDA, COL DE, 157, 258.
TITMOKREN, forest, 276.
TIXTER, 170.
TIZALET, 257.
TIZI, 279.
 Railway junction for Mascara, 2 trains daily.
TIZI-BART, 258.
TIZI-OUZOU, 153, 154, 214, 258.
Hôtel des Postes, primitive but respectable, 8 f.; *H. Garner*.
 Station for Fort National.
TIZI RACHED, 157.
TIZI-BENIFF, 153.
TLEMQEN, 268-276, 278, 279, 280, 283, 292, 293.

	PAGE
Arab Cemetery	272
Arab College, or Meddrassa	274
Bou Medin	271, 273
Fortifications	271
History	268
Mosques	270, 271, 273
Museum	270
Ruins at	272
The Cemetery	271
The Church	271
The Mairie	270
The Meshouar	270
The Sahardj	274

Hôtel de France.

Tlemçen can be reached by railway from Algiers in one day. From Oran the best way is by railway, changing at St. Barbe de Tlélat. There is also a way from Oran to Temouchent by train, thence by diligence.

TOMBEAU DE LA CHRÉTIENNE, 139, 148; legend of, 148, 179.

TOMBEAU DE LA NEIGE, 214.

TONGA, lake, 316.

TOMNARA, island, 136 330.

TORRE CHICA, 110.

TOUDJA, 117.

TOUMIET, 283.

TRAPPE DE STAOUËLI, LA, 109.

TRABLA, 289.

TRITON, lake, 335.

TROIS MARABOUTS, LES, 291.

TROIS PALMIERS, LES, 259.

TROIS RIVIÈRES, LES, 279.

TUGGURT, 231, 232, 233.

A very rude hotel.

Diligence runs from Biskra every third day, occupies 2 days. Cost, 50 f. each way. Bad.

	PAGE
Mosques	232
The Kasba	232
Tuggurt, oasis	232

TUNIS, 295, 307, 308, 310, 315, 318, 320, 321, 322, 323, 328, 336.

	PAGE
Bardo	307
Canal of	137
Cemeteries	298, 299
Churches	298
City	297
Colleges	299
Dar-el-Bey	300
Gates of	297

Historical Sketch	295
Kasba	300
Kasr es-Said	308
Mosques	300
Native Bazaars	297
Native Troops	300
Population	297
Public Instruction in Regency of	295
Religious Communi- ties in	298

H.B.M. Consul General, E. G. L. Berkeley, C.B.; **Vice-Consul**, G. Lascelles, Esq.

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Bazaars: Travellers will find it convenient to take a Guide if they are in a hurry, as the native part of the town is a per- fect labyrinth. Angelo Saliba of Hôtel de Paris, and M. Afrigan, Grand Hotel, are recommended as reliable Guides. Be-

ware of itinerant guides and hotel *commission- aires*. Cost 5 f. a day.

Means of Communi- cation: A. *Compagnie Gén. Transatlantique*. Leaves Marseilles for Tunis (36 hrs.), Mon., noon, direct, continuing (Wed. 4 P.M.) to Sfax and Sousse, and Fri., noon, touching at Bizerta. Leaves Tunis for Mar- seilles, Wed., 12.30 P.M., via Bizerta, and Fri., 8 P.M., direct. Leaves Tunis for Malta, Sun., 3 P.M., returning, Thurs., 5 P.M.

B. *Comp. Navig. Mize*. Dep. Marseilles, Wed., 4 P.M. Arr. Tunis, Fri., 8 A.M. Dep. Tunis, Sat., 4 P.M. Arr. Susa, Sun., 4 A.M. Thence along the coast to Sfax, Gabes, and Tripoli. Re- turning by Djierba, Gabes, Sfax, Mehedia, Monastir, and Susa, reaching Tunis, Sun., 8 A.M. Dep. Mon., 4 P.M., reaching Marseilles, Wed., 7 A.M.

C. The *Comp. Gen. Italiana* have a service from Tunis to Tripoli along the coast and on to Malta. Dep. Wed., 5 P.M. Also Tunis to Pa- lermo, via Pantellaria, Marsala, Trapani, Sat., 6 P.M. Arr. at Palermo, Mon., noon.

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Tunis, Gulf of, 325.

"TWELVE APOSTLES," THE,
 276.

U

UTICA, 137, 247.

V

VALLÉE DES CONSULS,
 III.

VALMY, 189.

VESOUL BENIAN, 180.

VILLE-LES-MINES, 158.

VOILE NOIRE, rock, 122.

VOIROL, COLONNE, the,
 107.

W

WARNIER, 259.

WELIS, OR SAINTS' TOMBS,
 258.

Z

ZAFFARINE ISLANDS, 13,
 280, 294.

ZAGHOUAN, 301, 320,
 321, 322, 323, 336.

	PAGE
Aqueduct	305, 320
Amphitheatre	322
Theatre, Reservoirs	322
History	321
El-Kasba	324

By railway from Tunis,
via Smindja, in about
 3 hrs.

ZAKKAR, mountain, 180.

ZAOUJET-SUSA, 328.

ZAROURIA, 233.

ZARZIS, 335.

ZEMBRA, island, 136,
 325.

ZEMBRETTE, island, 136.

ZERALDA, 147.

ZIAMA, 119.

ZIBAN, 18.

ZOUSFANA, river, 13.

ZURIOH, 144.

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1902-1903,

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Opposite the General Post Office in the Market Place. Open all the year round. Lift. Baths. Electric Light. Morning Sun. Verandah.
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FIRST-CLASS HOTEL, best situated in the valley, in the middle of an extensive garden. 240 Beds. Large sitting-rooms. Lift. Electric Light in all the rooms. English Chapel in the garden. Good attendance. Moderate charges. Cook's tickets taken. Open from 1st May until 1st October.

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This new First-class Hydropathic Establishment, with 250 Beds, two Lifts. Electric Light in all the rooms, Central Heating, opposite to the Hotel Titlis, will be open on the 1st June. The building is fitted up on the most recent hygienic principles. The various medical appliances fulfil the utmost demands of modern science and furnish everything necessary for hydropathic, mechanical and electric treatment. For illustrated prospectus and tariff please apply to the Proprietor, Ed. CATTANI.

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PATRONISED BY THE ROYAL FAMILY.

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Charming covered Continental Courtyard as Lounge.

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WELL KNOWN HOTEL WITH GOOD ACCOMMODATION, CONTAINING 100 BEDS.

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OPPOSITE THE CENTRAL RAILWAY STATION.

FIRST-CLASS HOTEL.

Lift.

Electric Light.

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First-class Family Hotel. Every Modern Comfort. Moderate Charges. Highly recommended to English and American Families.

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Opposite the Central Railway Station. Quietly situated in a large shady garden. 60 Rooms. Steam Heating. Electric Light. Good Beds. Large Restaurant. Full Board from 5 shillings a day. NO EXTRAS.

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First-class Hotel, on the Beach. The most important facing the Sea, near the Casino and the Jetty. Moderate Charges. Telephone. English spoken. Open June 15 to October 1.

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FREUDENSTADT. (2,600 feet above sea.)

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New First-class Hotel.

Close to Station, in best situation; surrounded by gardens. Electric Light. Steam Heating.

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Rond Point de Plainpalais.

Near the Bastion Park. Fine situation.

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FIRST-CLASS Hotel, nearest to the Station. Large Garden with covered Verandah. All Visitors' Rooms face the Garden. Oldest Hotel in the town, entirely renovated. Rooms from 2'50 to 5 marks, including light and attendance. Arrangements made for prolonged stay.

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First-class Establishment.

Affords every Modern Comfort.

ELECTRIC LIGHT IN EVERY ROOM. STEAM AND OTHER BATHS.

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RENOWNED FOR ITS SUPERIOR CUISINE AND WINE.

"RESTAURATEUR" of the SOUTH RAILWAY STATION.

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SECOND CLASS.

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First-class. Unrivalled for its great comfort. 350 Rooms. 20 Saloons. Electric Light throughout. **Central Heating.** Lawn Tennis Grounds. Concerts. Balls. First-class Restaurant. Autocar Shed.

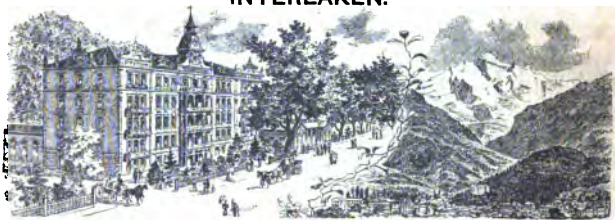
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RUGEN HOTEL, JUNGFRAUBLICK.*Not to be confounded with HOTEL JUNGFRAU.*

Highly respected and fashionable First-class Family Hotel. Situated in the highest and healthiest part of Interlaken. Beautiful views of the Glaciers and the Lakes. Very quiet position. Dust-free. Extensive walks in a large fir-tree forest. Lift. Electric Light in all the rooms. Open from May to October. J. OESCH-MÜLLER, *Proprietor and Manager.*

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CLOSE TO CENTRAL STATION.

Splendid View. Electric Light. Large Garden.

TERMS MODERATE.

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**Grand Hotel
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Facing the Imperial Villa. Most favourably known Hotel.

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Entirely new building and every comfort. Airy lodging-rooms and Saloons with a fine view, large dining and restaurant rooms. Electric Light. Large plateau with forest and parks, and beautiful shady promenades. Magnificent views in greater variety than from any other point of the Seven Mountains. Every Wednesday, Free Military Concert. Table d'Hôte at 1 o'clock; Dinners and Suppers at any hour. Acknowledged good cuisine and choice wines. Post and Telegraph in the house.

Wwe. **PETER JOS. NELLES, Proprietress.**

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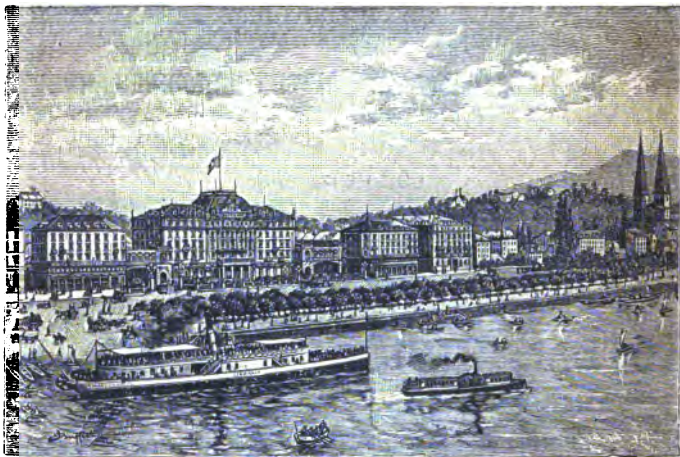
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IN THE BEST SITUATION ON THE LAKE AND PROMENADE.

600 BEDS.*Private Bath Rooms. Lift and Electric Light in both Hotels.*ARRANGEMENT EN PENSION WITH PROTRACTED STAY
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WITH GOOD WARMING SYSTEM.

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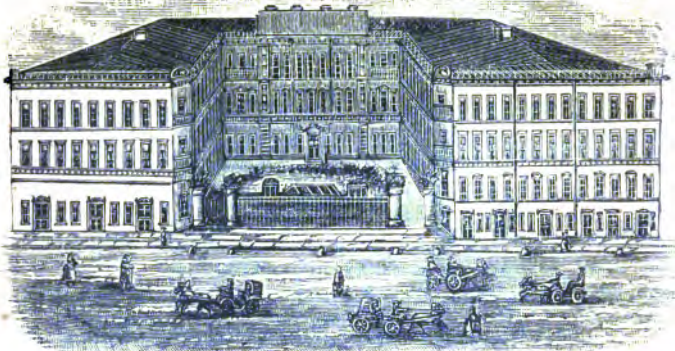
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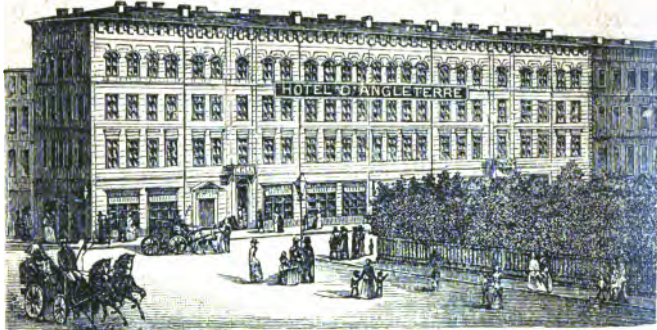
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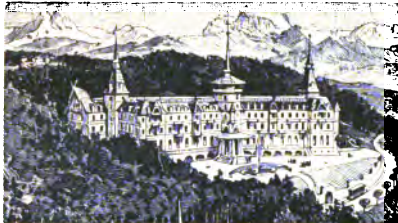
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